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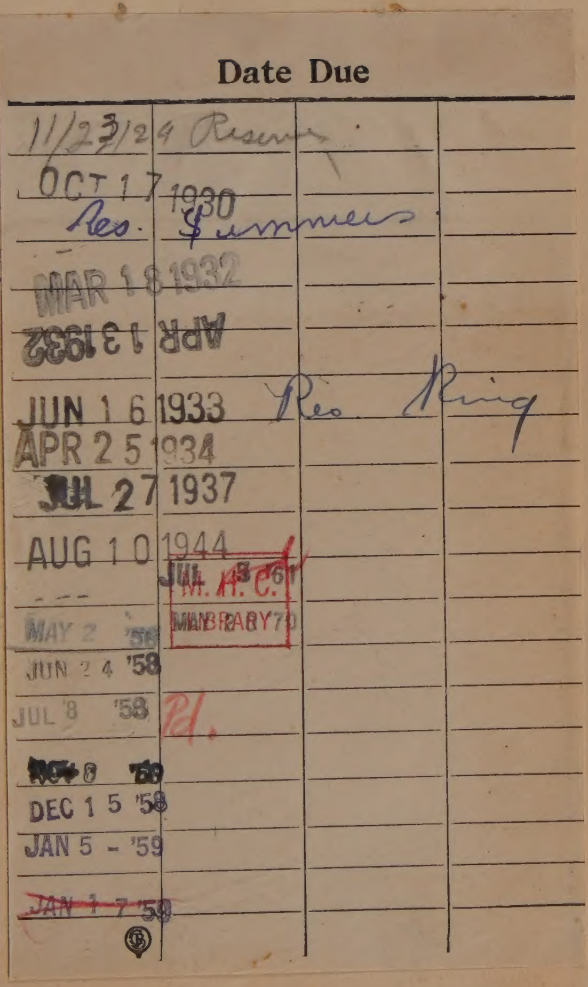

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PREFACE

THE need of providing large college classes with collateral reading in a course on the economic history of the United States has led to the preparation of this book. Its purpose has therefore been primarily to provide a sufficient body of material to supplement the more systematic text book and lectures. This material has, with only one or two exceptions, been drawn from contemporary sources; in the later periods, with the growing wealth of such material, official documents have been largely used. But in every period these documents have been supplemented by the more human and the more illuminating comments of travelers, observers, and others who were entitled to speak authoritatively. Where controversial matters have been treated, every effort has been made to present both sides fairly.

In the face of the great amount of material available for such a work as this the main task of the editors has necessarily been one of selection, and in performing this task they have endeavored to present a comprehensive yet balanced picture of the economic activities and development of each period. Agriculture, manufactures, tariff, commerce, transportation, money and banking, labor, and the movement of the population have, each in turn, been given due emphasis in the panoramic picture here unfolded. As among the different periods it is believed that a balance has been maintained that will commend itself to teachers of American history. To the period from 1600 to 1808 about one fourth of the book is devoted; one half to that from 1808 to 1860; and the remaining fourth to the period since the Civil War.

No effort has been made to adapt this book of readings to use with any particular text, and it is hoped that teachers of United States history in general will find it of value in presenting some phases of our development which do not always find a place in political histories.

E. L. BOGART
C. M. THOMPSON

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Readings in the Economic History of the United States

CHAPTER I

EXPLORATION AND COLONIZATION, 1583–1774

I. Methods of Planting a Colony

A. *The Cost of Colonizing, 1648* [1]

The actual work of colonizing America was undertaken by companies chartered for this purpose by the crown, or by wealthy individuals on their own account who were proprietors of the lands granted them. In either case there was usually hope and expectation of a financial return from the venture. The "adventurers" who financed the schemes generally contributed their money as an investment or speculation. In this description of the new country there are shrewdly intermingled directions to prospective adventurers, a statement of the terms upon which colonists will be received, and an optimistic picture of the returns to be secured.

Each Adventurer of twenty or fifty men must provide household necessaries, as irons and chains for a draw-bridge, two Mares or Horses to bred or ride on, Pots, Pans, Dishes, Iron for a Cart and Plow, Chains, Sithes, and Sickles, Nets, Lines, and Hooks. A sail for a fishing Shallop of three tun, and Hemp to employ his people in making them, as with hair, and canvas for quilts, as well on ship-board as demurring at the sea port, as with locks, keys, bolts, and glasse casements for his house. And generally fit Implements for the work or trade he intends.

For trade with the Indians, buy Dutch or Welch rugged cloth, seven quarters broad, a violet blew or red, at four or five shillings a yard, small hooks and fishing lines, Morris bels, Jewes-harps, Combes, trading knives, Hatchets, Axes, Hoes, they will bring you Venison,

---

[1] *A Description of the Province of New Albion. And a Direction for Adventurers with small stock to get two for one, and good land freely.* . . . By Beauchamp Plantaganet (1648). In Force, Tracts and Other Papers (Washington, 1838), II, no. vii, 31–35.

Turkeys, and Fowles, Flesh, &c. for a pennyworth of corn at twelve pence a bushell.

Provisions for each man, and the charge from London.

1. Canvas, or linnen clothes, Shooes, Hats, &c. costing here foure pounds for two men to buy Cows, Goats, and Hogs in *Virginia*, which there yeeld sixe pound, and will buy one Cow, and Oxe, two Goats two Sowes, which one each man comes to 2l. 0. 0.

2. Fraight for a Passenger, and his half Tun of provisions and Tooles. 1l. 10. 0.

3. Victuals till his own stock and crop maintain him for seven moneths. 3l. 10. 0.

That is, Pease, Oatmeal and Aquavite, 7s. five bushels of Meal, of which to be baked into Biskets, and five bushels of Malt, some must be ground and brewed for the voyage, both 1l. 10s. a hundred of Beefe, and Pork, 1l. 2s. two bushels of roots, 2s. salt fish, 2s. Cask to carry provision 5s. five pound of Butter 2s.

4. One Hogshead of eares of Corn Garden seeds, Hemp, and linseed with husk and some Rice from *Virginia*. 0. 16. 0.

5. Armes (*viz.*) a Sword, Calliver five foot long, or long Pistoll, Pikehead: six pound of powder, ten pound of shot, halfe an old slight Armour that is, two to one Armour 0. 19. 0.

6. Tools, a Spade, Axe, and Shovell, 5s. Iron and Steel to make and mend more, and two hundred of nails, 5s. 0. 10. 0.

7. Guns and Powder for the Fort, that is to every fifty foure Murtherers,*** a barell of powder 4l. 10s. that is to each man 5s.

8. A Bed and sheets of Canvas, to be filled with Huls, each man a Rug .. .. .. 15s.

Sum totall, 10l. 5. 0.

CHAP. VI.

Here by bringing good Labourers, and Tradesmen, the provident planters may doe well by giving shares or double wages, when each man may earn his five, nay sixe shillings a day in Tobacco, Flaxe, Rice. . . .

Passage and diet of a man, his bedding and chest thither, 5l. 0. 0.

Bedding will cost 15s. drams, fruit and spice	1. 0. 0.
In goods to buy a Cow, and stock each man here	2. 0. 0.
Arms, Ammunition, and Tools, each man	2. 0. 0.
Sum Totall	10. 0. 0.

All Adventurers of 500l. to bring fifty men shall have 5000 acres, and a manor with Royalties, at 5s. rent, and whosoever is willing so to transport himself or servant at 10l. a man, shall for each man have 100 acres freely granted forever, and at [manuscript illegible] may be instructed how in a moneth to passe, and in 20 days to get fit servants and artificers for wages, diet, and clothes, and apprentices according to the 3 Statutes 5 *Eliz.* All which after 5 years service, are to have 30 acres of free land, and some stock, and bee free-holders.

B. *Articles of Agreement of Plymouth Plantation, 1620*[1]

In the "Articles of Agreement of Plymouth Plantation" we have a good illustration of the terms upon which the colonists — who did the actual work of settlement and development and upon whose efforts depended the financial success of the venture — agreed to apply their time and labor and divide the profits. In the case of the Plymouth Company the capital necessary to finance the undertaking was to be furnished by the adventurers and all property to be put into a common stock until a final division should take place.

An°: 1620. July 1.

1. The adventurers & planters doe agree, that every person that goeth being aged 16. years & upward, be rated at 10^{li}., and ten pounds to be accounted a single share.

2. That he that goeth in person, and furnisheth him selfe out with 10^{li}. either in money or other provissions, be accounted as haveing 20^{li}. in stock, and in y^{e} devission shall receive a double share.

3. The persons transported & y^{e} adventurers shall continue their joynt stock & partnership togeather, y^{e} space of 7. years, (excepte some unexpected impedimente doe cause y^{e} whole company to agree otherwise,) during which time, all profits & benifits that are gott by trade, traffick, trucking, working, fishing, or any other means of any person or persons, remaine still in y^{e} com̄one stock untill y^{e} division.

4. That at their coming ther, they chose out such a number of fitt persons, as may furnish their ships and boats for fishing upon y^{e} sea; imploying the rest in their severall faculties upon y^{e} land; as building houses, tilling, and planting y^{e} ground, & makeing shuch com̄odities as shall be most usefull for y^{e} collonie.

5. That at y^{e} end of y^{e} 7. years, y^{e} capitall & profits, viz. the houses,

[1] William Bradford, *History of the Plimouth Plantation*, from the original manuscript (Boston, 1900), pp. 56–58.

lands, goods and chatles, be equally devided betwixte y^e^ adventurers, and planters; w^ch^ done, every man shall be free from other of them of any debt or detrimente concerning this adventure.

6. Whosoever cometh to y^e^ colonie herafter, or putteth any into y^e^ stock, shall at the ende of y^e^ 7. years be alowed proportionably to y^e^ time of his so doing.

7. He that shall carie his wife & children, or servants, shall be alowed for everie person now aged 16. years & upward, a single share in y^e^ devision, or if he provid them necessaries, a duble share, or if they be between 10. year old and 16., then 2. of them to be reconed for a person, both in trāsportation and devision.

8. That such children as now goe, & are under y^e^ age of ten years, have noe other shar in y^e^ devision, but 50. acers of unmanured land.

9. That such persons as die before y^e^ 7. years be expired, their executors to have their parte or sharr at y^e^ devision, proportionably to y^e^ time of their life in y^e^ collonie.

10. That all such persons as are of this collonie, are to have their meate, drink, apparell, and all provissions out of y^e^ cōmon stock & goods of y^e^ said collonie.

C. *Disadvantages of a Common Store, 1620* [1]

The plan of a common stock did not work any better in the Plymouth Plantation than it had in Virginia, but resulted in waste and lack of industry. In the first three years there resulted much suffering, which Governor Bradford attributed to this community of goods and undertook to correct by allotting to each man a separate plot of ground for his own use. Bradford was the first governor of Plymouth, and wrote a valuable history of the colony during the first twenty-five years of its existence.

Anno Dom: 1623

It may be thought strang that these people should fall to these extremities in so short a time, being left competently provided when y^e^ ship left them, and had an addition by that moyetie of corn that was got by trade, besids much they gott of y^e^ Indans wher they lived, by one means & other. It must needs be their great disorder, for they spent excessively whilst they had, or could get it; and, it may be, wasted parte away among y^e^ Indeans (for he y^t^ was their cheef was taxed by some amongst them for keeping Indean women, how truly I know not). And after they begane to come into wants, many sould away their cloathes and bed coverings; others (so base were they)

[1] William Bradford, *History of the Plimouth Plantation* (Boston, 1900), 156–157, 162–164.

became servants to y^e^ Indeans, and would cutt them woode & fetch them water, for a cap full of corne; others fell to plaine stealing, both night & day, from y^e^ Indeans, of which they greevosly complained. In y^e^ end, they came to that misery, that some starved & dyed with could & hunger. . . .

All this whille no supply was heard of, neither knew they when they might expecte any. So they begane to thinke how they might raise as much corne as they could, and obtaine a beter crope then they had done, that they might not still thus languish in miserie. At length, after much debate of things, the Gov^r^ (with y^e^ advice of y^e^ cheefest amongest them) gave way that they should set corne every man for his owne perticuler, and in that regard trust to them selves; in all other things to goe on in y^e^ generall way as before. And so assigned to every family a parcell of land, according to the proportion of their number for that end, only for present use (but made no devission for inheritance), and ranged all boys & youth under some familie. This had very good success; for it made all hands very industrious, so as much more corne was planted then other waise would have bene by any means y^e^ Gov^r^ or any other could use, and saved him a great deall of trouble, and gave farr better contente. The women now wente willingly into y^e^ feild, and tooke their litle-ons with them to set corne, which before would aledg weaknes, and inabilitie; whom to have compelled would have bene thought great tiranie and oppression.

The experience that was had in this comone course and condition, tried sundrie years, and that amongst godly and sober men, may well evince the vanitie of that conceite of Platos & other ancients, applauded by some of later times; — that y^e^ taking away of propertie, and bringing in comunitie into a comone wealth, would make them happy and florishing; as if they were wiser then God. For this comunitie (so farr as it was) was found to breed much confusion & discontent, and retard much imploymēt that would have been to their benefite and conforte. /For y^e^ youn-men that were most able and fitte for labour & service did repine that they should spend their time & streingth to worke for other mens wives and children, without any recompence. The strong, or man of parts, had no more in devission of victails & cloaths, then he that was weake and not able to doe a quarter y^e^ other could; this was thought injuestice. The aged and graver men to be ranked and equalised in labours, and victails, cloaths, &c., with y^e^ meaner & yonger sorte, thought it some indignite & disrespect unto them. And for mens wives to

be commanded to doe servise for other men, as dresing their meate, washing their cloaths, &c., they deemd it a kind of slaverie, neither could many husbands well brooke it./ Upon y^e^ poynte all being to have alike, and all to doe alike, they thought them selves in y^e^ like condition, and one as good as another; and so, if it did not cut of those relations that God hath set amongest men, yet it did at least much diminish and take of y^e^ mutuall respects that should be preserved amongst them. And would have bene worse if they had been men of another condition. Let none objecte this is men's corruption, and nothing to y^e^ course it selfe. I answer, seeing all men have this corruption in them, God in his wisdome saw another course fiter for them.

II. Suggestions to Colonists

A. *The Advantages of Colonies, 1583*[1]

Englishmen were slow to appreciate the advantages that would accrue to their country from the establishment of colonies in the New World. But some of the earlier adventurers, like Drake, Frobisher, Gilbert, and Raleigh, were alive to the benefits that would follow from the planting of colonies in the New World, and endeavored to persuade the government to take active measures to occupy the lands discovered and described by them. In the following extract Sir Humphrey Gilbert enumerates various advantages that England could derive from colonies.

. . . the fourth chapter sheweth how that the trade, traffic and planting in these countries is likely to prove very profitable and beneficial generally to the whole realm. It is very certain that the greatest jewel of this realm and the chieftest strength and force of the same, for defence or offence in martial matter and manner is the multitude of ships, masters, and mariners ready to assist the most stately and royal navy of her Majesty, which by reason of this voyage shall have both increase and maintenance. And it is well known that in sundry places of this realm ships have been built and set forth of late days for the trade of fishing only; yet, notwithstanding, the fish which is taken and brought into England by the English navy of fishermen will not suffice for the expense of this realm four months, if there were none else brought of strangers. And the chiefest cause why our English men do not go so far westerly as the especial fishing places do lie, both for plenty and greatness of fish,

[1] *A true Report of the late Discoveries and Possession Taken in the Right of the Crown of England of the Newfoundland.* By Sir Humphrey Gilbert, 1583. In *The Principal Novigations Voyages Traffiques & Discoveries of the English Nation.* By Richard Hakluyt (Glasgow, 1903), III, 167–81.

is for that they have no succour and known safe harbour in those parts. But if our nation were once planted there or thereabouts, whereas they now fish for but two months in the year, they might then fish for so long as pleased themselves . . . which being brought to pass shall increase the number of our ships and mariners. . . .

Moreover, it is well known that all savages . . . will take marvellous delight in any garment, be it ever so simple, as a shirt, a blue, a yellow, red, or green cotton cassock, a cap, or such like, and will take incredible pains for such a trifle . . . which being so, what vent for our English cloths will thereby ensue, and how great benefit to all such persons and artificers, whose names are quoted in the margin, I leave to such as are discreet. . . .

To what end need I endeavor myself by arguments to prove that by this voyage our navy and navigation shall be enlarged, when as there needeth none other reason than the manifest and late example of the near neighbors to this realm, the Kings of Spain and Portugal, who, since the first discovery of the Indies, have not only mightily enlarged their dominions, greatly enriched themselves and their subjects, but have also, by just account, trebled the number of their ships, masters and mariners, a matter of no small moment and importance?

Besides this, it will prove a general benefit unto our country, that, through this occasion, not only a great number of men which do live idly at home, and are burdenous, chargeable, and unprofitable to this realm, shall hereby be set on work, but also children of twelve or fourteen years of age, or under, may be kept from idleness, in making of a thousand kinds of trifling things, which will be good merchandise for that country. And, moreover, our idle women (which the realm may well spare) shall also be employed on plucking, drying, and sorting of feathers, in pulling, beating, and working of hemp, and in gathering of cotton, and divers things right necessary for dyeing. All which things are to be found in those countries most plentifully. And the men may employ themselves in dragging for pearl, working for mines, and in matters of husbandry, and likewise in hunting the whale for trane, and making casks to put the same in, besides in fishing for cod, salmon, and herring, drying, salting, and barrelling the same, and felling of trees, hewing and sawing of them, and such like work, meet for those persons that are no men of art or science.

Many other things may be found to the great relief and good employment of no small number of the natural subjects of this realm, which do now live here idly, to the common annoy of the whole State. Neither may I here omit the great hope and likelihood of a

passage beyond the Grand Bay into the South Seas, confirmed by sundry authors to be found leading to Cataia, the Moluccas and Spiceries, whereby may ensue as general a benefit to the realm, or greater than hath yet been spoken of, without either such charges or other inconveniences, as, by the tedious tract of time and peril, which the ordinary passage to those parts at this day doth minister. . . .

I must now, according to my promise, show forth some probable reasons that the adventurers in this journey are to take particular profit by the same. It is, therefore, convenient that I do divide the adventurers into two sorts, the noblemen and gentlemen by themselves, and the merchants by themselves. For, as I do hear, it is meant that there shall be one society of the noblemen and gentlemen, and another society of the merchants; and yet not so divided, but that each society may freely and frankly trade and traffic one with the other.

And first to bend my speech to the noblemen and gentlemen, who do chiefly seek a temperate climate, wholesome air, fertile soil, and a strong place by nature whereupon they may fortify, and there either plant themselves or such other persons as they shall think good to send to be lords of that place and country: — To them I say that all these things are very easy to be found within the degrees of 30 and 60 aforesaid, either by south or north, both in the continent and in islands thereunto adjoining, at their choice . . . and in the whole tract of that land, by the description of as many as have been there, great plenty of mineral matter of all sorts, and in very many places both stones of price, pearl and chrystal, and great store of beasts, birds, and fowls, both for pleasure and necessary use of man are to be found. . . .

And now for the better contemplation and satisfaction of such worshipful, honest-minded and well-disposed merchants as have a desire to the furtherance of every good and commendable action, I will first say unto them, as I have done before to the noblemen and gentlemen, that within the degrees aforesaid is doubtless to be found the most wholesome and best temperature of air, fertility of soil, and every other commodity or merchandise, for the which, with no small peril, we do travel into Barbary, Spain, Portugal, France, Italy, Muscovy and Eastland, and yet to the end my arguments shall not altogether stand upon likelihoods and presumptions, I say that such persons as have discovered and travelled those parts do testify that they have found in those countries all these things following, namely: — [a list of beasts, birds, fishes, trees, minerals, etc.] . . .

The sixth chapter sheweth that the traffic and planting in those countries shall be unto the savages themselves very beneficial and gainful. . . .

. . . First and chiefly, in respect of the most happy and gladsome tidings of the most glorious gospel of our Saviour Jesus Christ, whereby they may be brought from falsehood to truth, from darkness to light, from the highway of death to the path of life, from superstitious idolatry to sincere Christianity, from the devil to Christ, from hell to heaven. And if in respect of all the commodities they can yield us (were they many more) that they should receive but this only benefit of Christianity, they were more than fully recompensed. . . .

B. *Advice to Colonists to New England, 1621*[1]

The picture of conditions in the colony at Plymouth is as valuable to us today as the advice was then to the intending colonist. Winslow was one of the leading men in the colony and later became governor.

You shall understand that in this little time that a few of us have been here, we have built seven dwelling-houses and four for the use of the plantation, and have made preparation for divers others. We set the last spring some twenty acres of Indian corn, and sowed some six acres of barley and pease; and according to the manner of the Indians, we manured our ground with herrings, or rather shads, which we have in great abundance, and take with great ease at our doors. Our corn did prove well; and, God be praised, we had a good increase of Indian corn, and our barley indifferent good, but our pease not worth the gathering, for we feared they were too late sown. They came up very well, and blossomed; but the sun parched them in the blossom. . . .

For the temper of the air here, it agreeth well with that in England; and if there be any difference at all, this is somewhat hotter in summer. Some think it to be colder in winter; but I cannot out of experience so say. The air is very clear and not foggy, as hath been reported. I never in my life remember a more seasonable year than we have here enjoyed; and if we have once but kine, horses, and sheep, I make no question but men might live as contented here as in any part of the world. For fish and fowl, we have great abundance. Fresh cod in the summer is but coarse meat with us. Our bay is full of

[1] *Relation or Iournall*, etc. By Edward Winslow (London, 1622). In *Chronicles of Pilgrim Fathers*. By Alexander Young (Boston, 1841), 230–8, *passim*.

lobsters all the summer, and affordeth variety of other fish. In September we can take a hogshead of eels in a night, with small labor, and can dig them out of their beds all the winter. We have muscles and othus [others?] at our doors. Oysters we have none near, but we can have them brought by the Indians when we will. All the spring-time the earth sendeth forth naturally very good sallet herbs. Here are grapes, white and red, and very sweet and strong also; strawberries, gooseberries, raspas, &c.; plums of three sorts, white, black, and red, being almost as good as a damson; abundance of roses, white, red, and damask; single, but very sweet indeed. The country wanteth only industrious men to employ; for it would grieve your hearts if, as I, you had seen so many miles together by goodly rivers uninhabited; and withal, to consider those parts of the world wherein you live to be even greatly burthened with abundance of people. These things I thought good to let you understand, being the truth of things as near as I could experimentally take knowledge of, and that you might on our behalf give God thanks, who hath dealt so favorably with us. . . .

Now because I expect your coming unto us, with other of our friends, whose company we much desire, I thought good to advertise you of a few things needful. Be careful to have a very good bread-room to put your biscuits in. Let your cask for beer and water be iron-bound, for the first tire, if not more. Let not your meat be dry-salted; none can better do it than the sailors. Let your meal be so hard trod in your cask that you shall need an adz or hatchet to work it out with. Trust not too much on us for corn at this time, for by reason of this last company that came, depending wholly upon us, we shall have little enough till harvest. Be careful to come by some of your meal to spend by the way; it will much refresh you. Build your cabins as open as you can, and bring good store of clothes and bedding with you. Bring every man a musket or fowling piece. Let your piece be long in the barrel, and fear not the weight of it, for most of our shooting is from stands. Bring juice of lemons, and take it fasting; it is of good use. For hot waters, aniseed water is the best; but use it sparingly. If you bring anything for comfort in the country, butter or sallet oil, or both, is very good. Our Indian corn, even the coarsest, maketh as pleasant meat as rice; therefore spare that, unless to spend by the way. Bring paper and linseed oil for your windows, with cotton yarn for your lamps. Let your shot be most for big fowls, and bring store of powder and shot. I forbear further to write for the present, hoping to see you by the

next return. So I take my leave, commending you to the Lord for a safe conduct unto us, resting in him,

Your loving friend,

E. W.

Plymouth, in New England, this 11th of December, 1621.

C. *Information respecting Land in New Netherland, 1650*[1]

The colonization of New Netherland by the Dutch proceeded rather more slowly than that of the neighboring colonies, and various methods were followed by the States General to hasten its development. The following extract is from a report to them by their secretary on the conditions of settlement.

Information relative to taking up land in New Netherland, in the form of Colonies or private bouweries. Delivered in by Secretary van Tienhoven, on the 4th of March, 1650. . . .

Boors and others who are obliged to work at first in Colonies ought to sail from this country in the fore or latter part of winter, in order to arrive with God's help in New Netherland early in the Spring, in March, or at latest in April, so as to be able to plant, during that summer, garden vegetables, maize and beans, and moreover employ the whole summer in clearing land and building cottages, as I shall hereafter describe.

All then who arrive in New Netherland must immediately set about preparing the soil so as to be able, if possible to plant some winter grain, and to proceed the next winter to cut and clear the timber. The trees are usually felled from the stump, cut up and burnt in the field, unless such as are suitable for building, for palisades, posts and rails, which must be prepared during the winter, so as to be set up in the spring on the new made land which is intended to be sown, in order that the cattle may not in any wise injure the crops. In most lands is found a certain root, called red Wortel, which must before ploughing, be extirpated with a hoe, expressly made for that purpose. This being done in the winter, some plough right around the stumps, should time or circumstances not allow these to be removed; others plant tobacco, maize and beans, at first. The soil even thus becomes very mellow, and they sow winter grain the next fall. From tobacco, can be realized some of the expenses incurred in clearing the land. The maize and beans help to support both men and cattle. The farmer having thus begun, must en-

[1] *Documents relative to the Colonial History of the State of New York.* Ed. by E. B. O'Callaghan (Albany, 1856), I, 365–71, *passim.*

deavor, every year, to clear as much new land as he possibly can, and sow it with such seed as he considers most suitable.

It is not necessary that the husbandman should take up much stock in the beginning, since clearing land and other necessary labor do not permit him to save much hay and to build barns for stabling. One pair of draft horses or a yoke of oxen only is necessary, to ride the planks for buildings, or palisades or rails from the land to the place where they are to be set.

The farmer can get all sorts of cattle in the course of the second summer, when he will have more leisure to cut and bring home hay, also to build houses and barns for men and cattle.

Before beginning to build, 'twill above all things be necessary to select a well located spot, either on some river or bay, suitable for the settlement of a village or hamlet. This is previously properly surveyed and divided into lots, with good streets according to the situation of the place. This hamlet can be fenced all around with high palisades or long boards and closed with gates, which is advantageous in case of attack by the natives, who heretofore used to exhibit their insolence in new plantations.

Outside the village or hamlet, other land must be laid out which can in general be fenced and prepared at the most trifling expense.

Those in New Netherland and especially in New England, who have no means to build farm-houses at first according to their wishes, dig a square pit in the ground, cellar fashion, six or seven feet deep, as long and as broad as they think proper, case the earth inside all round the wall with timber, which they line with the bark of trees or something else to prevent the caving in of the earth; floor this cellar with plank and wainscot it overhead for a ceiling, raise a roof of spars clear up and cover the spars with bark or green sods, so that they can live dry and warm in these houses with their entire families for two, three and four years, it being understood that partitions are run through those cellars which are adapted to the size of the family. The wealthy and principal men in New England, in the beginning of the Colonies, commenced their first dwelling-houses in this fashion for two reasons; first, in order not to waste time building and not to want food the next season; secondly, in order not to discourage poorer laboring people whom they brought over in numbers from Fatherland. In the course of three or four years, when the country became adapted to agriculture, they built themselves handsome houses, spending on them several thousands.

After the houses are built in the above described manner, or other-

wise according to each person's means and fancy, gardens are made and planted in season with all sorts of pot-herbs, principally parsnips, carrots and cabbage, which bring great plenty into the husbandman's dwelling. The maize can serve as bread for men, and food for cattle.

The hogs, after having picked up their food for some months in the woods, are crammed with corn in the fall; when fat they are killed and furnish a very hard and clean pork; a good article for the husbandman who gradually and in time begins to purchase horses and cows with the produce of his grain and the increase of his hogs, and instead of a cellar as aforesaid, builds good farm-houses and barns. . . .

The following is the mode pursued by the West India Company in the first planting of Bouweries.

The Company, at their own cost and in their own ships conveyed several boors to New Netherland, and gave these the following terms:—

The farmer, being conveyed with his family over sea to New Netherland, was granted by the Company for the term of six years a Bouwerie, which was partly cleared, and a good part of which was fit for the plough.

The Company furnished the farmer a house, barn, farming implements and tools, together with four horses, four cows, sheep and pigs in proportion, the usufruct and enjoyment of which the husbandman should have during the six years, and on the expiration thereof, return the number of cattle he received. The entire increase remained with the farmer. The farmer was bound to pay yearly one hundred gilders and eighty pounds of butter rent for the cleared land and bouwerie.

The country people who obtained the above mentioned conditions all prospered during their residence on the Company's lands.

Afterwards the cattle belonging to the Company in New Netherland were distributed for some years among those who had no means to purchase stock.

The risk of the cattle dying is shared in common, and after the expiration of the contract the Company receives, if the cattle live, the number the husbandman first received, and the increase which is over, is divided half and half; by these means many people have obtained stock and, even to this day, the Company have still considerable cattle among the Colonists, who make use on the above conditions of the horses in cultivating the farm; the cows serve for the increase of the stock and for the support of the family. . . .

D. *Advice to Immigrants to Maryland, 1655*[1]

After having lived nineteen years in Virginia, John Hammond removed to Maryland, from which place he wrote the following account. It gives a trustworthy description of the conditions, as well as some good advice to immigrants.

When ye go aboard, expect the Ship somewhat troubled and in a hurliburly, untill ye cleer the lands end, and that the Ship is rummaged, and things put to rights, which many times discourages the Passengers, and makes them wish the Voyage unattempted: but this is but for a short season, and washes off when at Sea, where the time is pleasantly passed away, though not with such choise plenty as the shore affords.

But when ye arrive and are settled, ye will find a strange alteration, an abused Country giving the lye in your own approbations to those that have calumniated it, and these infalable arguments may convince all incredible and obstinate opinions, concerning the goodnesse and delightfulnesse of the Country, that never any servants of late times have gone thither, but in their Letters to their Friends commend and approve of the place, and rather invite than disswade their acquaintance from comming thither. . . .

The labour servants are put to, is not so hard nor of such continuance as Husbandmen, nor Handecraftmen are kept at in *England*, as I said little or nothing is done in winter time, none ever working before sun rising nor after sun set, in the summer they rest, sleep or exercise themselves five houres in the heat of the day, Saturdayes afternoon is alwayes their own, the old Holidayes are observed and the Sabboath spent in good exercises.

The Women are not (as is reported) put into the ground to worke, but occupie such domestique imployments and houswifery as in *England*, that is dressing victuals, righting up the house, milking, imployed about dayries, washing, sowing, &c., and both men and women have times of recreations, as much or more than in any part of the world besides, yet som wenches that are nasty, beastly and not fit to be so imployed are put into the ground, for reason tells us, they must not at charge be transported and then maintained for nothing, but those that prove so aukward are rather burthensome then servants desirable or usefull.

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[1] *Leah and Rachel, or, The Two Fruitfull Sisters Virginia and Mary-land.* By John Hammond (London, 1656). Reprinted in Force, Tracts and Other Papers, III, no. xiv, 11–13, and in Original Narratives of Early American History, XI, 289–291.

The Country is fruitfull, apt for all and more than *England* can or does produce. The usuall diet is such as in *England*, for the rivers afford innumerable sortes of choyce fish, (if they will take the paines to make wyers or hier the Natives, who for a small matter will undertake it,) winter and summer, and that in many places sufficient to serve the use of man, and to fatten hoggs. Water-fowle of all sortes are (with admiration to be spoken of) plentifull and easie to be killed, yet by many degrees more plentifull in some places than in othersome. Deare all over the Country, and in many places so many that venison is accounted a tiresom meat; wilde Turkeys are frequent, and so large that I have seen some weigh neer threescore pounds; other beasts there are whose flesh is wholsom and savourie, such are unknowne to us; and therefore I will not stuffe my book with superfluous relation of their names; huge Oysters and store in all parts where the salt-water comes.

The Country is exceedingly replenished with Neat cattle, Hoggs, Goats and Tame-fowle, but not many sheep; so that mutton is somewhat scarce, but that defect is supplied with store of Venison, other flesh and fowle. The Country is full of gallant Orchards, and the fruit generally more luscious and delightfull than here, witnesse the Peach and Quince, the latter may be eaten raw savourily, the former differs and as much exceeds ours as the best relished apple we have doth the crabb, and of both most excellent and comfortable drinks are made. Grapes in infinite manners grow wilde, so do Walnuts, Smalnuts, Chesnuts and abundance of excellent fruits, Plums and Berries, not growing or known in *England;* graine we have, both *English* and *Indian* for bread and Bear, and Pease besides *English* of ten several sorts, all exceeding ours in *England;* the gallant root of Potatoes are common, and so are all sorts of rootes, herbes and Garden stuffe.

E. *An Invitation to Colonists for Carolina, 1666* [1]

The following extract is from a pamphlet written to attract colonists, setting forth the terms upon which they will be settled in the province of Carolina. It will be noticed that both free persons and indented servants are welcomed.

The chief of the Privileges are as follows.

First, There is full and free Liberty of Conscience granted to all, so that no man is to be molested or called in question for matters of

[1] *A Brief Description of the Province of Carolina.* By Robert Horne (?) (London, 1666). Reprinted in Original Narratives of Early American History. Edited by J. F. Jameson (New York, 1910), XII, 71–73. Printed by permission of the editor and the publishers, Charles Scribner's Sons.

Religious Concern; but every one to be obedient to the Civil Government, worshipping God after their own way.

Secondly, There is freedom from Custom, for all Wine, Silk, Raisins, Currance, Oyl, Olives, and Almonds, that shall be raised in the Province for 7. years, after 4 Ton of any of those commodities shall be imported in one Bottom.

Thirdly, Every Free-man and Free-woman that transport themselves and Servants by the 25 of March next, being 1667. shall have for Himself, Wife, Children, and Men-servants, for each 100 Acres of Land for him and his Heirs forever, and for every Woman-servant and Slave 50 Acres, paying at most ½*d.* per acre, *per annum*, in lieu of all demands, to the Lords Proprietors: Provided always, That every Man be armed with a good Musquet full bore, 10*l.* Powder, and 20*l.* of Bullet, and six Months Provision for all, to serve them whilst they raise Provision in that Countrey.

Fourthly, Every Man-Servant at the expiration of their time, is to have of the Country a 100 Acres of Land to him and his heirs for ever, paying only ½*d.* per Acre, *per annum*, and the Women 50. Acres of Land on the same conditions; their Masters also are to allow them two Suits of Apparrel and Tools such as he is best able to work with, according to the Custom of the Countrey.

Fifthly, They are to have a Governour and Council appointed from among themselves, to see the Laws of the Assembly put in due execution; but the Governour is to rule but 3 years, and then learn to obey; also he hath no power to lay any tax, or make or abrogate any Law, without the Consent of the Colony in their Assembly.

Sixthly, They are to choose annually from among themselves, a certain Number of Men, according to their divisions, which constitute the General Assembly with the Governour and his Council, and have the sole power of Making Laws, and Laying Taxes for the common good when need shall require.

These are the chief and Fundamental privileges, but the Right Honourable Lords Proprietors have promised (and it is their interest so to do) to be ready to grant what other Privileges may be found advantageous for the good, of the Colony.

Is there therefore any younger Brother who is born of Gentile blood, and whose Spirit is elevated above the common sort, and yet the hard usage of our Country hath not allowed suitable fortune; he will not surely be afraid to leave his Native Soil to advance his Fortunes equal to his Blood and Spirit, and so he will avoid those

unlawful ways too many of our young Gentlemen take to maintain themselves according to their high education, having but small Estates; here, with a few Servants and a small Stock a great Estate may be raised, although his Birth have not entituled him to any of the Land of his Ancestors, yet his Industry may supply him so, as to make him the head of as famous a family. . . .

If any Maid or single Woman have a desire to go over, they will think themselves in the Golden Age, when Men paid a Dowry for their Wives; for if they be but Civil, and under 50 years of Age, some honest Man or other, will purchase them for their Wives.

Those that desire further advice, or Servants that would be entertained, let them repair to Mr. Matthew Wilkinson, Ironmonger, at the Sign of the Three Feathers, in Bishopsgate-Street, where they may be informed when the ships will be ready, and what they must carry with them.

F. *Advice to Immigrants to South Carolina, 1731* [1]

The author here gives some specific directions and advice to intending emigrants such as would best aid them in making preparations for their departure to a new and unknown country.

Proposals by Mr. Peter Purry, *of* Newfchatel, *for Encouragement of such* Swiss *Protestants as should agree to accompany him to* Carolina, *to settle a New Colony.*

There are only two Methods, *viz:* one for Persons to go as Servants, the other to settle on their own Account.

1. Those who are desirous to go as Servants must be Carpenters, Vine-planters, Husbandmen, or good Labourers.

2. They must be such as are not very Poor, but in a Condition to carry with them what is sufficient to support their common necessity.

3. They must have at least 3 or 4 good Shirts, and a Suit of Cloathes each.

4. They are to have each for their Wages 100 Livres yearly, which make 50 Crowns of the Money of *Newfchatel* in *Swisserland*, but their Wages are not to commence till the Day of their arrival in *Carolina.*

[1] *A Description of the Province of South Carolina, Drawn up at Charles Town, in September, 1731.* By J. P. Purry, *et al.* In Force, Tracts and Other Papers (Washington, 1836), II, no. xi, 14–16.

5. Expert Carpenters shall have suitable Encouragement.

6. The time of their Contract shall be 3 Years, reckoning from the Day of their arrival in that Country.

7. They shall be supply'd in part of their Wages with Money to come from *Swisserland*, till they imbark for *Carolina*.

8. Their Wages shall be paid them regularly at the end of every Year; for security whereof they shall have the Fruits of their Labour, and generally all that can be procured for them, whether Moveables or Imoveables.

9. Victuals and Lodging from the Day of their Imbarkation shall not be put to their Account, nor their Passage by Sea.

10. They shall have what Money they want advanced during the Term of their Service in part of their Wages to buy Linnen, Clothes, and all other Necessaries.

11. If they happen to fall Sick they shall be lodg'd and nourish'd Gratis, but their Wages shall not go on during their Illness, or that they are not able to Work.

12. They shall serve after Recovery, the time they had lost during their Sickness.

13. What goes to pay Physicians or Surgeons, shall be put to their Accompt.

As to those who go to settle on their own Account, they must have at least 50 Crowns each, because their Passage by Sea, and Victuals, will cost from 20 to 25 Crowns, and the rest of the Money shall go to procure divers things which will be absolutely necessary for the Voyage.

It may not be disagreeable in this Place to inform our Readers, that Mr. *Purry*, on his Return to *Swisserland*, with this Account of Carolina, soon prevail'd on many industrious Persons and their Families to the Number of about 400, to go with him. On the 11th of this Month [August, 1732] they embarked at *Calais* in *France*, on Board two *English* Ships, which arrived off *Dover* the next Day, and are now sailed on their Voyage. Mr. *Bignion* their Minister came to *London*, and received Episcopal Ordination: So that the Reflections which some have cast on the Religion of these People, are unjustly founded.

G. *Design of Establishing the Colony in Georgia, 1733*[1]

The colony of Georgia was planned as a philanthropic enterprise to serve as a refuge for the poor and distressed in Europe. It was to be managed by a board of trustees. General Oglethorpe, who was the founder of the colony, was a man of the highest character and motives.

SOME ACCOUNT OF THE DESIGNS OF THE TRUSTEES FOR ESTABLISHING THE COLONY OF GEORGIA IN AMERICA.

In *America* there are fertile lands sufficient to subsist all the useless Poor in *England*, and distressed Protestants in Europe; yet Thousands starve for want of mere sustenance. The distance makes it difficult to get thither. The same want that renders men useless here, prevents their paying their passage; and if others pay it for 'em, they become servants, or rather slaves for years to those who have defrayed the expense. Therefore, money for passage is necessary, but is not the only want; for if people were set down in America, and the land before them, they must cut down trees, build houses, fortify towns, dig and sow the land before they can get in a harvest; and till then, they must be provided with food, and kept together, that they may be assistant to each other for their natural support and protection. . . .

FROM THE CHARTER.— His Majesty having taken into his consideration, the miserable circumstances of many of his own poor subjects, ready to perish for want: as likewise the distresses of many poor foreigners, who would take refuge here from persecution; and having a Princely regard to the great danger the southern frontiers of South Carolina are exposed to, by reason of the small number of white inhabitants there, hath, out of his Fatherly compassion towards his subjects, been graciously pleased to grant a charter for incorporating a number of gentlemen by the name of *The Trustees for establishing the Colony of Georgia in America*. They are impowered to collect benefactions; and lay them out in cloathing, arming, sending over, and supporting colonies of the poor, whether subjects or foreigners, in Georgia. And his Majesty farther grants all his lands between the rivers Savannah and Alatamaha, which he erects into a Province by the name of Georgia, unto the Trustees, in trust for the poor, and for the better support of the Colony. . . .

[1] *A Brief Account of the Establishment of the Colony of Georgia under Gen. James Oglethorpe* (London, 1783). In Force, Tracts and Other Papers (Washington, 1835), I, no. ii, 4–5.

The Trustees intend to relieve such unfortunate persons as cannot subsist here, and establish them in an orderly manner, so as to form a well regulated town. As far as their fund goes, they will defray the charge of their passage to Georgia; give them necessaries, cattle, land, and subsistence, till such time as they can build their houses and clear some of their land. . . .

H. *Information to Those Who Would Remove to America, 1760* [1]

In spite of a century and a half of colonization of America by Europeans, and especially by Englishmen, there was a great deal of ignorance and misconception as to actual conditions there. No one was better fitted to describe the situation and give some needed advice than Franklin, with his sound judgment and thorough knowledge.

Many persons in Europe, having directly or by letters, expressed to the writer of this, who is well acquainted with North America, their desire of transporting and establishing themselves in that country; but who appear to have formed, through ignorance, mistaken ideas and expectations of what is to be obtained there; he thinks it may be useful, and prevent inconvenient, expensive, and fruitless removals and voyages of improper persons, if he gives some clearer and truer notions of that part of the world, than appear to have hitherto prevailed. . . .

The truth is, that though there are in that country few people so miserable as the poor of Europe, there are also very few that in Europe would be called rich; it is rather a general happy mediocrity that prevails. There are few great proprietors of the soil, and few tenants; most people cultivate their own lands, or follow some handicraft or merchandise; very few are rich enough to live idly upon their rents or incomes, or to pay the highest prices given in Europe for painting, statues, architecture, and the other works of art, that are more curious than useful. . . . Of civil offices, or employments, there are few; no superfluous ones, as in Europe; and it is a rule established in some of the States, that no office should be so profitable as to make it desirable. . . .

These ideas prevailing more or less in all the United States, it can not be worth any man's while, who has a means of living at home, to expatriate himself, in hopes of obtaining a profitable civil office in America; and, as to military offices, they are at an end with the war, the armies being disbanded. Much less is it advisable for a person to

[1] *Information to those who would Remove to America.* By Benjamin Franklin. In Works (Sparks Edition, Boston, 1840), II, 467–472.

go thither, who has no other quality to recommend him but his birth. In Europe it has indeed its value; but it is a commodity that cannot be carried to a worse market than that of America, where people do not inquire concerning a stranger, *What is he?* but, *What can he do?* If he has any useful art, he is welcome; and if he exercises it, and behaves well he will be respected by all that know him; but a mere man of quality who, on that account, wants to live upon the public, by some office or salary, will be despised and disregarded. The husbandman is in honor there, and even the mechanic, because their employments are useful....

With regard to encouragements for strangers from government, they are really only what are derived from good laws and liberty. Strangers are welcome, because there is room enough for them all, and therefore the old inhabitants are not jealous of them; the laws protect them sufficiently, so that they have no need of the patronage of great men; and everyone will enjoy securely the profits of his industry. But, if he does not bring a fortune with him, he must work and be industrious to live. One or two years' residence gives him all the rights of a citizen; but the government does not, at present, whatever it may have done in former times, hire people to become settlers, by paying their passages, giving land, negroes, utensils, stock, or any other kind of emolument whatsoever. In short, America is the land of labor, and by no means what the English call *Lubberland*, and the French *Pays de Cocagne*, where the streets are said to be paved with half-peck loaves, the houses tiled with pancakes, and where fowls fly about already roasted, crying, *Come eat me!*

Who then are the kind of persons to whom an emigration to America may be advantageous? And what are the advantages they may reasonably expect?

Land being cheap in that country, from the vast forests still void of inhabitants, and not likely to be occupied in an age to come, insomuch that the propriety of an hundred acres of fertile soil full of wood may be obtained near the frontiers, in many places, for eight or ten guineas, hearty young laboring men, who understand the husbandry of corn and cattle, which is nearly the same in that country as in Europe, may easily establish themselves there. A little money saved of the good wages they receive there, while they work for others, enables them to buy the land and begin their plantation, in which they are assisted by the good-will of their neighbors, and some credit. Multitudes of poor people from England, Scotland, Ireland, and Germany, have by this means in a few years become wealthy farmers, who, in their own countries, where all the lands are fully occupied,

and the wages of labor low, could never have emerged from the poor condition wherein they were born.

From the salubrity of the air, the healthiness of the climate, the plenty of good provisions, and the encouragement to early marriages by the certainty of subsistence in cultivating the earth, the increase of inhabitants by natural generation is very rapid in America, and becomes still more so by the accession of strangers; hence there is a continual demand for artisans of all the necessary and useful kinds, to supply those cultivators of the earth with houses, and with furniture and utensils of the grosser sorts, which cannot so well be brought from Europe. Tolerably good workmen in any of those mechanic arts are sure to find employ, and to be well paid for their work, there being no restraints preventing strangers from exercising any art they understand, nor any permission necessary. If they are poor, they begin first as servants or journeymen; and if they are sober, industrious, and frugal, they soon become masters, establish themselves in business, marry, raise families, and become respectable citizens.

Also, persons of moderate fortunes and capitals, who, having a number of children to provide for, are desirous of bringing them up to industry, and to secure estates for their posterity, have opportunities of doing it in America, which Europe does not afford. There they may be taught and practise profitable mechanic arts, without incurring disgrace on that account, but on the contrary acquiring respect by such abilities. There small capitals laid out in lands, which daily become more valuable by the increase of people, afford a solid prospect of ample fortunes thereafter for those children.

III. Grants of Land and Land Tenure

A. *New England Laws on Inheritance, 1641* [1]

These laws show not merely the effect of the Mosaic law upon the legal theories of the early Pilgrims, but also the effect of common land holdings in England. It took some time for them to adjust their theories to the reality of practically unlimited land and to admit unrestricted private property in land.

Chap. IV.— *Of the right of Inheritance.*

1. First, Forasmuch as the right of disposals of the Inheritance of all Lands in the Countrey, lyeth in the Generall Court, whatsoever Lands are given and assigned by the Generall Court, to any Town or person shall belong and remaine as right of Inheritance to

[1] *An Abstract of the Lavves of Nevv England as they are novv established* (London, 1641). In Force, Tracts and Other Papers (Washington, 1844), III, no. ix, 8–10.

such Townes and to their successors, and to such persons and their heires and Assignes as their propriety for ever.

Whatsoever Lands belong to any Town, shall be given and assigned by the Town or by such Officers therein, as they shall appoint unto any person, the same shall belong and remaine, unto such persons and his heires and assignes as his proper right for ever.

3. And in dividing of Lands to the severall persons in each Town, as regard is to be had partly to the number of the persons in family: To the more assigning the greater allotment, to the fewer lesse, and partly by the number of beasts, by the which a man is fit to occupy the Land assigned to him, and subdue it: Eminent respect (in this case may be given to men of eminent quality and descent) in assigning unto them more large and honorable accommodations, in regard of their great disbursements to publike charges.

4. Forasmuch as all Civill affaires are to be administered and ordered, so as may best conduce to the upholding and setting forward of the worship of God in Church fellowship. It is therefore ordered, that wheresoever the Lands of any mans Inheritance shall fall, yet no man shall set his dwelling house above the distance of halfe a mile or a mile at the furthest, from the meeting of the Congregation, where the Church doth usually assemble for the worship of God.

5. Inheritances are to descend naturally to the next of kinne, according to the Law of Nature, delivered by God.

6. If a man have more Sonnes than one, then a double portion to be assigned, and bequeathed to the eldest Son, according to the Law of Nature, unlesse his own demerit do deprive him of the dignity of his Birth right. . . .

B. *Advice on Granting Lands, 1665*[1]

These suggestions as to granting land in a new country are significant, for they show the slight value that attaches to the land and the paramount necessity of attracting settlers. Under such conditions it was not to be wondered at that large grants were frequent. Woodward was surveyor for the proprietors of Carolina.

. . . I UNDERSTAND by M^r^ Drummond and M^r^ Carterett that you and the rest of the Right Honorable the Lords Proprietors of the Province of Carolina have appointed me to be Surveyor for your Countie of Albemarle. . . . And though I know it befitts not me to dispute your commands but rather to operate them Coeca Obedientia yet (by your Honors permission) I cannot omit to per-

[1] *Colonial Records of North Carolina.* Edited by W. L. Saunders (Raleigh, 1886), I, 99–100.

forme another part of my dutie (so I am though unworthy) one of the counsell here to give you my opinion concerning some passages in the Instructions your Honore sent us. . . .

Next the Proportione of Land you have allotted with the Rent, and conditione are by most People not well resented and the very Rumor of them dis-courages many who had intentions to have removed from Virginia hether: Whilst my Lord Baltamore allowed to every persons imported but fiftie acres; Maryland for many yeares had scarce fiftie families, though there Rent was rather easier then in Virginia; but when he allotted one hundred Acres for a Person, it soone began to People. and when he found them begin to increase, he brought it to fiftie a head againe So if your Lordships please to give large Incouragement for some time till the country be more fully Peopled, your Honore may contract for the future upon what condition you please But for the Present, To thenke that any men will remove from Virginia upon harder Conditione then they can live there will prove (I feare) a vaine Imagination, It bein Land only that they come for. . . .

And it is my Opinion, (which I submitt to better Judgments) that it will for some time conduce more to your Lordshipe Profit to permit men to take up what tracts of Land they please at an easie rate, then to stint them to small proportions at a great rent, Provided it be according to the custome of Virginia which is fifty Pole by the river side, and one mile into the woods for every hundred acres; there being no man that will have any great desire to pay Rent (though but a farthing an acre) for more land than he hopes to gaine by. Rich men (which Albemarle stands in much need of) may perhaps take up great Tracts; but then they will endeavour to procure Tenants to helpe towards the payment of their Rent, and will at their owne charge build howseing (which poore men cannot compasse) to invite them: . . .

C. *Grants of Land by Governors, 1774*[1]

In all the provinces grants of land had been made by the governors to colonists and others, sometimes improperly and upon an enormous scale. The information contained in this extract was collected by the Board of Trade to form the basis of new instructions to the governors in the matter of granting land. These instructions were issued in 1774.

From the above Extracts and Observations it appears that the Governors derive their Power of granting Lands solely from their

[1] Public Record Office, London. Colonial Office, Papers, 5. 216. pp. 5–7.

Instructions, that these Powers differ according to the Circumstances of the different Provinces, and that some of the Governors have no Power to grant Lands:

In Virginia, which is an Old and well peopled Province, the Governor is restrained from granting more than 1000 Acres in one Grant to one Person. In Nova Scotia which is a late settled Province and where the Land from its Northern Situation is reckoned not so valuable the Governor has the power of granting the enormous Quantity of 100,000 Acres: In West Florida and East Florida the quantity is 20,000 Acres, And in Granada and the ceded Islands where the Land has been esteemed extremely valuable the Gov^{r} has no Power of granting even an Acre, this Trust being thought worthy of a very expensive manner of Sale by Commissioners under a Special Commission, to the Validity of whose Grants the Consent of the Governor is however requisite in the first Instance, and the Confirmation of the Lords Commissioners of the Treasury in the last.

The Power of granting Lands being therefore derived from the Instructions, a fresh Instruction may either increase, diminish or entirely annul the Governors Power of Granting Lands.

Method of Granting Land in Pensylvania.

Dr. Franklin's account of the Method of granting Lands in Pensilvania.

The whole lands are at the absolute Disposal of the Proprietor, who grants them in what quantities and upon what Conditions he pleases. The Method which has been generally followed hitherto is this

The Power to grant Lands has been given to the Governor by a Special Commission. When any Person applyes for a Grant there is a Warrant for a Survey, issued from the Land Office, returnable as soon as the Lands are Surveyed. The quantity expressed in the Warrant never exceeds 300 Acres. The patent ought to be made out immediately upon return of the Warrant, but this is sometimes allowed to lie over till the person is in condition to pay. The Consideration required by the Proprietor is £5 Sterling per hundred Acres paid down and 8s. 4d. Sterling per Annum of perpetual quit rent. Although there are never any more than 300 Acres expressed in the Warrant, yet there is no strict limitation provided the Grantee pays for the whole that he takes up. There has been to the amount of 1100 Acres Surveyed and held under one Warrant.

Upon the whole the Doctor observes, that the Lands in Pensilvania are more properly sold than granted by the Proprietor.

D. *Methods of Granting Lands, 1773*[1]

This discussion of the older and newer methods of granting lands in North America is contained in a paper submitted by Captain Williams to the Earl of Dartmouth, November 18, 1773. It points out that the Crown had now determined to sell the vacant lands rather than any longer to give them away. In this way, as well as by means of taxes, the colonies were to be made to contribute to the revenues of the mother country. It is interesting to note this early suggestion for the system of rectangular surveys afterwards adopted by the government of the United States. After survey and division the lands, under this system, were auctioned off. The system was inaugurated just prior to the Revolution, but the results of its working out were obscured by the war.

The Spirit of emigration to North America being now so prevailing in Europe, the Immense tracts of land which the Crown possesses in that Continent are of Course of the greatest Importance, and therefore every Step ought to be taken to regulate every thing relative to them, to prevent the great Confusion which has hitherto attended the grants of those lands and establish an easier and more certain Method of collecting the Quit rents, which *have* allways fallen short in every Province of what they really ought to be.

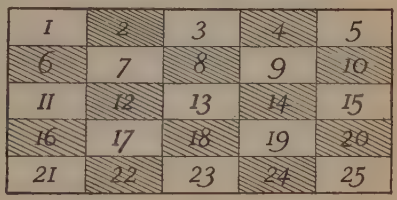
There has been two modes of granting lands in North America; In the first and oldest the Patents only specified some particular land Marks supposing to contain so many acres within them as were intended to be granted to the person or persons who applied, but they generally Contained a greater quantity, and the Quit rents of those grants are lower than those of a later date;

In the second and latest Mode an exact description of the tract granted is given in the Patent, and it also particularly Specifies the Number of acres granted, but these likewise generally contain a greater quantity than is Specified, as Neither the Surveyor General, or his Deputy make an exact Survey of those tracts before the Patents are Issued out; and altho' the Quit rents are very Small in proportion to the real value of the lands, Yet the owners do Not by these means pay what they ought to do; to obviate this and assertain the exact quantity each land holder ought to pay for, every old patent should be very exactly Survey'd and upon such a Survey every persons being found to have a greater quantity of land than what their patents Specify should be obliged to give up the overplus or pay for every acre of such overplus the price given in the Province for vacant lands, and ever afterwards the full quit rents for the whole.

[1] Earl of Dartmouth *MSS.*, 743.

A Separate draught of each patent should be Made out very distinct and accurate, Sworn to by the Surveyor General or his Deputy, delivered and lodged at the Council Office, after which an exact Map of each Province distinquishing every patent and the quantity of lands contained in each should be made out from the Several draughts and delivered at the Council's Office by the Surveyor General; No Patent should be Issued out from this time for vacant lands but what should be very exactly Survey'd and a draught of such a Survey particularly describing and Specifying the exact quantity of acres be attested upon Oath by the Surveyor General or his Deputy and annexed to the Patent. . . .

NB, as Government is Come to a determination to dispose of all vacant lands in North America by way of sale, the Crown's revenue might hereafter be considerably encreased by having the Several tracts laid out and numbered into townships of twenty thousand acres each as in the draught below, then every other Number only should be disposed of at first at a low rate, untill the half of each tract so laid out is granted, keeping and reserving to the Crown the remaining checkered half to be sold hereafter, and which the first Settlers as well as New ones would then be glad to purchase at a good price and a higher quit rent, to the great emolument of the Crown who would also by this means settle much sooner every vacant tract in each Province.



Draught of a tract of land supposed to contain five hundred thousand acres devided into twenty five townships of twenty thousand acres each thirteen of which are disposed of Immediately and twelve reserved to be sold at an advanced price, as for example 13 townships sold now at one shilling p^{r} acre and Subject to a quit rent of $\frac{2}{6}$ per hundred acres will give £13,000 and £325 per annum and Supposing that in ten years time the twelve remaining townships sell only at the rate of three shillings p^{r} acre and Subject to a quit rent of three pence, will give £36,000 and £3000 per annum.

CHAPTER II

AGRICULTURE, INDUSTRY, AND TRADE, 1607–1763

The occupations to which the colonists addressed themselves after their settlement in America may be divided into three groups. In the first come agriculture, and stock raising and the extractive industries, as lumbering, the fur trade, and fishing. To these the colonists turned as offering the quickest and most lucrative reward for their efforts. The soil was everywhere rich and extremely productive, while necessity dictated resort to agriculture to secure a permanent subsistence. Forest and water teemed with life and offered products that could be secured with a minimum of effort, and, what was quite as important, with a minimum application of capital. The products thus obtained were moreover in great demand in Europe and could be easily exchanged there for the manufactured goods and commodities of the Old World.

The second group of occupations were those that called for a larger investment of capital and more time and labor for their production. Such were shipbuilding, manufacturing, and the production of naval stores. While the last was closely allied to the extractive industries, it involved considerable skill and capital to develop it, while the returns were rather uncertain. Consequently all of these industries were developed more slowly and later than agriculture and the extractive industries. They can flourish only after a community has secured for itself an assured subsistence and has begun to accumulate capital.

The third branch of industry was that of commerce, or the exchange of the raw materials and natural products of the New World for the manufactured commodities, textiles, tools, etc., of the industrially more developed nations of Europe. In this trade the colonists not only offered their products for exchange, but also acted as carriers and earned large profits with their ships. A most lucrative branch of this trade consisted in the exchange of the American continental products for those grown in the warmer climate of the West Indies.

AGRICULTURE

I. Methods of the Indians

Indian Agriculture in Virginia, 1612 [1]

The first task that confronted the colonists was to provide themselves with food, and in solving this problem they were greatly assisted by observing the practice of the Indians and often by friendly advice from them, as from Pocohontas in Virginia and Squanto in New England. In planting and cultivating maize, which was an unfamiliar grain, but one upon which they principally relied

[1] *Description of Virginia and Proceedings of the Colonie.* By Captain John Smith (Oxford, 1612). In Original Narratives of Early American History. Edited by J. F. Jameson (New York, 1910), IV 95–6. Printed by permission of the editor and the publishers, Charles Scribner's Sons.

in the first distressful years, they followed exactly the Indian methods. These are described for us by John Smith in Virginia.

The greatest labour they take, is in planting their corne, for the country naturally is overgrowne with wood. To prepare the ground they bruise the barke of the trees neare the roote, then do they scortch the roots with fire that they grow no more. The next yeare with a crooked peece of wood, they beat up the woodes by the rootes; and in that moulds, they plant their corne. Their manner is this. They make a hole in the earth with a sticke, and into it they put 4 graines of wheat and 2 of beanes. These holes they make 4 foote one from another. Their women and children do continually keepe it with weeding, and when it is growne midle high, they hill it about like a hop-yard.

In Aprill they begin to plant, but their chiefe plantation is in May, and so they continue till the midst of June. What they plant in Aprill they reape in August, for May in September, for June in October. Every stalke of their corne commonly beareth two eares, some 3, seldome any 4, many but one, and some none. Every eare ordinarily hath betwixt 200 and 500 graines. . . .

II. Agriculture in New England

Poor Farming by New Englanders, 1775[1]

Agriculture was the primary industry during the whole of the colonial period and after the first few years of trial offered a certain and comfortable living to the colonist. But since the land was relatively so abundant as compared with labor and capital it was used uneconomically and wastefully. The colonial system of agriculture has generally been called a system of "land butchery," but it was natural under the circumstances and economically intelligible if not altogether justifiable.

A careful survey of American agriculture from Nova Scotia to Georgia was made in 1775 by the anonymous author of *American Husbandry*, which furnishes the best picture we have of conditions as they existed toward the end of the colonial period. We may, however, accept them as fairly representative of conditions during the larger part of this period, for little change had been made and few improvements introduced. The writer describes American practices carefully and intelligently, but with a strong prejudice for Old World methods. He is most severe in his criticism of New England methods of tillage and treatment of cattle, which are described in the following extract.

The crops commonly cultivated are, first maize, which is the grand product of the country, and upon which the inhabitants prin-

[1] *American Husbandry*. By an American (London, 1775). I, 50, 51–2, 55–8, 80–1.

cipally feed. . . . The expences of this culture per acre have been thus stated.

	l.	s.	d.
Seed	0	0	6
Culture	0	11	8
Harvesting, &c.	0	3	6
Conveyance to market	0	4	6
Sundries	0	2	6
	1	2	8

And the value, straw included, amounts to, from 50s. to 4l. sterling, per English acre, which is certainly very considerable: but then their management in other respects renders the culture not so cheap as it may appear at first sight, for the New England farmers practice pretty much the same system as their brethren in Canada; they have not a just idea of the importance of throwing their crops into a proper arrangement, so as one may be a preparation for another, and thereby save the barren expence of a mere fallow. Maize is a very exhausting crop; scarce anything exhausts the land more. . . .

Besides maize, they raise small quantities of common wheat; but it does not produce so much as one would apprehend from the great richness of the soil: . . .

Barley and oats are very poor crops, yet do they cultivate both in all parts of New England: the crops are such as an English farmer, used to the husbandry of the eastern parts of the kingdom, would think not worth standing; this I attribute entirely to climate, for they have land equal to the greatest productions of those plants. Their common management of these three sorts of grain, wheat, barley, and oats, is to sow them chiefly on land that has laid fallow for two or three years, that is, left undisturbed for weeds and all sorts of trumpery to grow; though at other times they sow oats or barley after maize, which they are enabled to do by the culture they give the latter plant while it is growing: . . .

Pease, beans, and tares, are sown variously through the province, but scarcely anywhere managed as they are in the well cultivated parts of the mother country. But every planter or farmer grows enough of the food for fattening hogs, for supplying his own family, and driving some fat ones to market. Hogs are throughout the province in great plenty, and very large, a considerable export from the province constantly goes on in barrelled pork, besides the vast demand there is for the fishery, and the shipping in general.

Apples may be mentioned as an article of culture throughout New England, for there is no farmer, or even cottager, without a large orchard: some of them of such extent, that they make three or four hundred hogsheads of cyder a man; besides exporting immense quantities of apples from all parts of the province. The orchards in New England are reckoned as profitable as any other part of the plantation. . . .

The cattle commonly kept here are the same as in Great Britain: cows, oxen, horses, sheep, and hogs; they have large dairies, which succeed quite as well as in Old England; oxen they fat to nearly as great a size; their mutton is good; and the wool which their sheep yield is long but coarse; but they manufacture it into coarse cloths, that are the common and only wear of the province, except the gentry, who purchase the fine cloths of Britain: no inconsiderable quantities of these coarse New England cloths are also exported to other colonies, to the lower people of whom, especially to the northward, they answer better than any we can send them. The horses are excellent, being the most hardy in the world; very great numbers are exported to the West-Indies, and elsewhere. . . .

And this mention of cattle leads me to observe, that most of the farmers in this country are, in whatever concerns cattle, the most negligent ignorant set of men in the world. Nor do I know any country in which animals are worse treated. Horses are in general, even valuable ones, worked hard, and starved: they plough, cart, and ride them to death, at the same time that they give very little heed to their food; after the hardest day's works, all the nourishment they are like to have is to be turned into a wood, where the shoots and weeds form the chief of the pasture; unless it be after the hay is in, when they get a share of the after-grass. A New Englander (and it is the same quite to Pensylvania) will ride his horse full speed twenty or thirty miles; tye him to a tree, while he does his business, then re-mount, and gallop back again. This bad treatment extends to draft oxen; to their cows, sheep, and swine; only in a different manner, as may be supposed. There is scarce any branch of rural œconomy which more demands attention and judgment than the management of cattle; or one which, under a judicious treatment, is attended with more profit to the farmers in all countries; but the New England farmers have in all this matter the worst notions imaginable.

I must, in the next place, take notice of their tillage, as being weakly and insufficiently given: worse ploughing is no where to be

seen, yet the farmers get tolerable crops; this is owing, particularly in the new settlements, to the looseness and fertility of old woodlands, which, with very bad tillage, will yield excellent crops: a circumstance the rest of the province is too apt to be guided by, for seeing the effects, they are apt to suppose the same treatment will do on land long since broken up, which is far enough from being the case. Thus, in most parts of the province, is found shallow and unlevel furrows, which rather scratch than turn the land; and of this bad tillage the farmers are very sparing, rarely giving two ploughings if they think the crop will do with one; the consequence of which is their products being seldom near so great as they would be under a different management. Nor are their implements well made, or even well calculated for the work they are designed to perform: . . .

III. Agriculture in the Middle Colonies

A. *Agriculture in New York, 1775*[1]

In the more genial climate and richer soil of the Middle Colonies the returns to man's cultivation of the land were greater than they were in New England, and there was a greater variety of agricultural products. The author of *American Husbandry* seems impressed by these facts and is less severe in his criticisms of prevailing methods.

Wheat in many parts of the province [New York] yields a larger produce than is common in England: upon good lands about Albany, where the climate is the coldest in the country, they sow two bushels and better upon one acre, and reap from 20 to 40: the latter quantity, however, is not often had; but from 20 to 30 bushels are common, and this with such bad husbandry as would not yield the like in England, and much less in Scotland. This is owing to the richness and freshness of the soil. In other parts of the province, particularly adjoining to New Jersey and Pensylvania, the culture is better and the country more generally settled. Though there are large tracts of waste land within twenty miles of the city of New York.

Rye is a common crop upon the inferior lands, and the sort they produce is pretty good, though not equal to the rye of England. The crops of it are not so great in produce as those of wheat on the better lands.

Maize is sown generally throughout the province, and they get vast crops of it. . . . It is also of great advantage in affording a vast

[1] *American Husbandry*. By an American (London, 1775). I, 98–103.

produce of food for cattle in the winter, which in this country is a matter of great consequence, where they are obliged to keep all their cattle housed from November till the end of March, with exception indeed of unprovident farmers, who trust some out the chief of the winter, to their great hazard.

Barley is much sown in all the southern parts of the province; and the crops they sometimes get of it are very great, but the grain is not of a quality equal to that of Europe. They make much malt and brew large quantities of beer from it at New York, which serves the home consumption, and affords some also for exportation. Pease are a common article of culture here, and though uncertain in their produce, yet are they reckoned very profitable; and the straw is valued as winter food. Thirty bushels per acre they consider as a large crop, but some times they get scarcely a third of that. Oats they sow in common, and the products are generally large; sixty bushels an acre have been known on land of but moderate fertility. Buckwheat is everywhere sown, and a few crops are supposed to pay the farmer better, at the same time that they find it does very little prejudice to the ground, in which it resembles pease.

Potatoes are not common in New England, but in New York many are planted; and upon the black, loose, fresh woodland they get very great crops, nor does any pay them better if so well, for at the city of New York there is a constant and ready market for them; I have been assured that from five to eight hundred bushels have been often gained on an acre.

There are many very rich meadows and pastures in all parts of the province; and upon the brooks and rivers, the watered ones (for they are well acquainted with that branch of husbandry) are mown twice and yield large crops of hay. In their marshes they get large crops also, but it is a coarse bad sort; not however to a degree, as to make cattle refuse it, on the contrary, the farmers find it of great use in the winter support of their lean cattle, young stock, and cows. . . . The fruits in this province are much superior to those in New England; and they have some, as peaches and nectarines, which will not thrive there. Immense quantities of melons, and water melons are cultivated in the fields near New York, where they come to as great perfection as in Spain and Italy; nor can it well be conceived how much of these fruits and peaches, &c. all ranks of people eat here, and without receiving any ill consequence from the practice. This is an agreeableness far superior to any thing we have in England; and indeed, the same superiority runs through all their fruits, and

several articles of the kitchen garden, which are here raised without trouble, and in profusion. Every planter and even the smallest farmers have all an orchard near their house of some acres, by means of which they command a great quantity of cyder, and export apples by ship loads to the West Indies. Nor is this an improper place to observe that the rivers in this province and the sea upon the coast are richly furnished with excellent fish; oysters and lobsters are no where in greater plenty than in New York. I am of opinion they are more plentiful than at any other place on the globe; for very many poor families have no other subsistence than oysters and bread. Nor is this the only instance of the natural plenty that distinguishes this country: the woods are full of game, and wild turkies are very plentiful; in these particulars New York much exceeds New England.

B. *Agriculture in New Jersey, 1749* [1]

The same wasteful methods that characterized colonial agriculture elsewhere were noted by Peter Kalm in New Jersey and Pennsylvania. Kalm was a Swedish botanist and professor of economics who traveled in America during the years 1748 to 1751. He was a trained and accurate observer and his reports are the most trustworthy that we have.

The rye grows very ill in most of the fields [in New Jersey], which is chiefly owing to the carelessness in agriculture, and to the poorness of the fields, which are seldom or never manured. After the inhabitants have converted a tract of land into fields, which had been a forest for many centuries together, and which consequently had a very fine soil, they use it as such, as long as it will bear any corn; and when it ceases to bear any, they turn it into pastures for the cattle, and rake new corn-fields in another place, where a fine soil can be met with, and where it has never been made use of for this purpose. This kind of agriculture will do for some time; but it will afterwards have bad consequences, as every one may clearly see. A few of the inhabitants, however, treated their fields a little better: the English in general have carried agriculture to a higher degree of perfection than any other nation. But the depth and richness of the soil, which those found here who came over from England, (as they were preparing land for ploughing which had been covered with woods from times immemorial) misled them, and made them careless hus-

[1] *Travels into North America.* By Peter Kalm. (2d ed., London, 1772.) In Pinkerton's Voyages and Travels, XIII, 564–5, 410, 401.

bandmen. . . . They had nothing to do but to cut down the wood, put it up in heaps, and to clear the dead leaves away. They could then immediately proceed to ploughing, which in such loose ground is very easy; and having sown their corn, they got a most plentiful harvest. This easy method of getting a rich crop has spoiled the English and other European inhabitants, and induced them to adopt the same method of agriculture which the Indians make use of; that is, to sow uncultivated grounds, as long as they will produce a crop without manuring, but to turn them into pastures as soon as they can bear no more, and to take in hand new spots of ground, covered since time immemorial with woods, which have been spared by the fire or the hatchet ever since the creation. This is likewise the reason why agriculture, and the knowledge of this useful branch, is so imperfect here, that one can learn nothing in a great tract of land, neither of the English, nor of the Swedes, Germans, Dutch, and French; except that, from their gross mistakes and carelessness for futurity, one finds opportunities every day of making all sorts of observations, and of growing wise at the expence of other people. In a word, the corn-fields, the meadows, the forests, the cattle, &c. are treated with great carelessness by the inhabitants. We can hardly be more lavish of our woods in Sweden and Finland than they are here: their eyes are fixed upon the present gain, and they are blind to futurity. Every day their cattle are harrassed by labour, and each generation decreases in goodness and size, by being kept short of food, as I have before mentioned. . . .

IV. Agriculture in the South

A. *A Colonial Plantation, 1686* [1]

The following description of a Virginia plantation at the end of the 17th century was written by Colonel William Fitzhugh, a prosperous planter, lawyer, and merchant. When he died in 1701, he left 54,000 acres of land and many slaves. The importance of tobacco is clearly shown in the account of the income to be derived from this plantation.

April 22nd, 1686.

Doctr. Ralph Smith

In order to the Exchange you promised to make for me & I desire you to proceed therein, to say to Exchange an Estate of Inheritance

[1] *Letters of William Fitzhugh.* In the Virginia Magazine of History and Biography (Richmond, 1893), I, 395–6. Printed by permission of the publisher, the Virginia Historical Society.

in land there [i. e. England] of two or three hundred pound a year, or in houses in any town of three or four hundred pound a year, I shall be something particular in the relation of my concerns here that is to go in return thereof. As first the Plantation where I now live contains a thousand acres, at least 700 acres of it being rich thicket, the remainder good hearty plantable land, without any waste either by marshes or great swamps the commodiousness, conveniency, & pleasantness yourself well knows, upon it there is three quarters well furnished with all necessary houses; grounds and fencing, together with a choice crew of negro's at each plantation, most of them this country born, the remainder as likely as most in Virginia, there being twenty nine in all, with stocks of cattle & hogs at each quarter, upon the same land, is my own Dwelling house furnished with all accommodations for a comfortable & gentile living, as a very good dwelling house with rooms in it, four of the best of them hung & nine of them plentifully furnished with all things necessary & convenient, & all houses for use furnished with brick chimneys, four good Cellars, a Dairy, Dovecot, Stable, Barn, Henhouse, Kitchen & all other conveniencys & all in a manner new, a large Orchard, of about 2500 Aple trees most grafted, well fenced with a Locust fence, which is as durable as most brick walls, a Garden, a hundred foot square, well pailed in, a Yeard wherein is most of the foresaid necessary houses, pallizado'd in with locust Punchens, which is as good as if it were walled in & more lasting than any of our bricks, together with a good Stock of Cattle, hogs, horses, mares, sheep, &c., necessary servants belonging to it, for the supply and support thereof. About a mile & half distance a good water Grist miln, whose tole I find sufficient to find my own family with wheat & Indian corn for our necessitys & occasions up the River in this country three tracts of land more, one of them contains 21996 acres, another 500 acres, & one other 1000 acres, all good convenient & commodious Seats, & w^{ch} in few years will yield a considerable annual Income. A stock of Tob^{o} with the crops and good debts lying out of about 250000^{lb} besides sufficient of almost all sorts of goods, to supply the familys & the Quarter's occasion for two if not three years. Thus I have given you some particulars, which I thus deduce the yearly crops of Corn and Tob^{o} together with the surplusage of meat more than will serve the family's use, will amount annually to 60000^{lb} Tob^{o} W^{ch} at 10 shillings p C^{os} 300£ p annum, & the negroes increase being all young & a considerable parcel of breeders will keep that stock good for ever. The stock of Tob^{o} managed with an inland trade will yearly yield

60000lb Tob° without hazard or risque, which will be both clear without charge of house keeping or disbursements for servants cloathing. The Orchard in a very few years will yield a large supply to plentifull house keeping or if better husbanded yield at least 10000lb Tob° annual income. . . .

To Doctr. Ralph Smith in Bristol

B. *Tobacco Cultivation in Virginia, 1650*[1]

As early as the middle of the 17th century the main features which characterized the growing of tobacco were evident in Virginia. These were the exhaustion of the soil, the lack of rotation of crops or of fertilization of the soil, the dispersion of the population, and the necessity of a large amount of fresh land to replace that which was worn out. Clayton was an English clergyman and has given an unusually intelligent account of Virginia.

But not to ramble after here-say, and other Matters; but to return to the parts of *Virginia* inhabited by the *English*, which in general is a very fertile Soil, far surpassing *England*, . . . for the generality of *Virginia* is a sandy Land with a shallow Soil: so that after they have clear'd a fresh piece of Ground out of the Woods, it will not bear Tobacco past two or three Years, unless Cow-pened; for they manure their Ground by keeping their Cattle, as in the South you do your Sheep, every Night confining them within Hurdles, which they remove when they sufficiently dung'd one spot of Ground; but alas! they cannot improve much thus, besides it produces a strong sort of Tobacco, in which the Smoakers say they can plainly taste the fulsomness of the Dung. Therefore every three or four Years they must be for clearing a new piece of Ground out of Woods, which requires much Labour and Toil, it being so thick grown all over with massy Timber. Thus their Plantations run over vast Tracts of Ground, each ambitious of engrossing as much as they can, that they may be sure to have enough to plant, and for their Stocks and Herds of Cattle to range and to feed in; that Plantations of 1000, 2000, or 3000 Acres are common, whereby the Country is thinly inhabited; the Living solitary and unsociable; Trading confused and dispersed; besides other Inconveniences: Whereas they might improve 200 or 300 Acres to more Advantage, and would make the Country much more healthy; for those that have 3000 Acres, have

[1] *A Letter from Mr. John Clayton, Rector of Crofton at Wakefield in Yorkshire, to the Royal Society, May 12, 1688.* In Force, Tracts and Other Papers (Washington, 1844), III, no. xii, 20–23, *passim.*

scarce cleared 600 Acres thereof, which is peculiarly term'd the Plantation, being surrounded with 2400 Acres of Wood: . . . Now, you must know they top their Tobacco, that is, take away the little top bud, when the Plant has put forth as many Leaves as they think the richness of the Ground will bring to a Substance; but generally when it has shot forth four or six Leaves. And when the top-bud is gone, it puts forth no more Leaves, but Side-branches, which they call Suckers, which they are careful ever to take away, that they may not impoverish the Leaves.

C. *Tobacco the Sole Crop in Virginia, 1703*[1]

For a century after the settlement of Virginia tobacco was cultivated almost to the exclusion of every other agricultural product.

Colonel Robert Quary to the Lords of Trade

. . . . The People are very numerous — dispersed through the whole province [of Virginia] — Their almost sole business is planting and improving Tobacco, even to that degree that most of them scarce allow themselves time to produce their necessary provision, and consequently take little leisure to busy themselves about matters of State. . . .

Your Lordshipps'
Most obedient servant
(signed) Robt Quary

D. *Diversified Agriculture in Virginia, 1775*[2]

By the second third of the 18th century the exhaustion of the tobacco lands of Virginia and Maryland led to a decline in the cultivation of tobacco and the adoption of more diversified general farming.

As to fruit trees, they have all those which are known to us in Europe or Pensylvania; particularly, apples, pears, cherries, quinces, plums, grapes, peaches, and nectarines, in the same plenty as in Pensylvania, so as to be applied to the same use of feeding hogs as there. All other fruits are produced here, as may from the climate be supposed.

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[1] *Documents relative to the Colonial History of New York.* Edited by E. B. O'Callaghan (Albany, 1856–87), IV, 1051.

[2] *American Husbandry.* By an American (London, 1775), I. 219–20.

Besides tobacco, which is the staple of these colonies, and of which I shall speak more by-and-by, wheat and all our other kinds of grain and pulse thrive here equally, if not in a superior degree, to any of our other colonies; . . . and in these articles of common husbandry the planters have increased much more than in tobacco, for reasons which I shall explain hereafter.

No part of America, or indeed of the world, boasts more plentiful or more general production of all sorts of garden vegetables; and in a state of excellence that is proportioned to the heat of the climate. The same remark may also be made of their fish and fowl, having every sort that is found in Pensylvania, with others that are peculiar to the country; being in all respects of food as plentiful as any territory in the world.

E. *Cattle in South Carolina, 1731* [1]

Cattle multiplied rapidly, even when uncared for, in the mild climate and plentiful pasturage of South Carolina. Herds of a thousand cattle or more were not infrequent.

The Cattle of *Carolina* are very fat in Summer, but as lean in Winter, because they can find very little to eat, and have no Cover to shelter them from the cold Rains, Frosts, and Snows, which lasts sometimes 3 or 4 Days: Only the Cattle design'd for the Butchery are fed, and they bad enough, with Potatoes, Straw, and Grain; but they always lie in the open Field, for there is not one Hovel in all the Country, either for Oxen or Cows. If you object this to the Planters, they answer, that such Houses or Hovels would do very well, but that they have too many other Affairs to think of that. The last Winter being very severe about 10,000 horned Cattle died of Hunger and Cold. Notwithstanding this, the People will not change their Conduct, because they do not understand the manner of ordering Cattle, nor even know how to mow the Grass, in order to make it into Hay, of which they might have great Plenty for Fodder. Their Ignorance in this respect is very great, which is the Reason that Butter is always dear, being sold last Winter at 7*s.* 6*d.* *per* Pound, and in *January* and *February* last it was sold at *Charles Town* for 12*s.* *per* Pound: In a word, nothing would be more easy than for Persons who understand Country Affairs to grow rich in a little time. There is so great a number of Cattle, that a certain Planter had last

[1] *A Description of the Province of South Carolina.* By J. P. Purry *et al.* In Force, Tracts and Other Papers (Washington, 1837), II, no. xi, 8–9.

Spring 200 Calves marked, which he let run in the Woods with other Cattle; Nobody looks after them, or takes any other Care, but to bring them together in the Evening to lie in a Park near the House.

At certain times they kill a great many to send the Flesh salted to several other Colonies, where there is little Pasturage, particularly to the Isles of *Antilles*, and in general to all those of the *Torrid Zone*.

Horses, the best Kind in the World, are so plentiful, that you seldom see any body travel on foot, except *Negroes*, and they oftner on horseback; so that when a Taylor, a Shoemaker, or any other Tradesman, is obliged to go but 3 Miles from his House, it would be very extraordinary to see him travel on foot.

There is likewise in this Country a prodigious number of Swine, which multiply infinitely, and are kept with very little Charge, because they find almost all the Year Acorns, of which there is 5 or 6 sorts, as also Nuts, Walnuts, Chesnuts, Herbs, Roots, *&c.* in the Woods: So that if you give them neverso little at Home they become fat; after which you may salt and send great quantities of them to the Isles of *Barbadoes*, *St. Christophers*, *Jamaica*, *&c.* which produced very good Returns either in Money or Merchandizes.

Of all Animals in that Country, none are a less Charge than Sheep, for they subsist only on what they find in the Fields; yet are always in good Case, and bring forth their Lambs regularly; and there is a particular sort, whose Wool is not inferiour to the finest *Spanish* Wool.

F. *Agriculture and Stock-raising in North Carolina, 1775* [1]

The practice of an orderly agriculture had not progressed very far in North Carolina, even by the end of the colonial period. The bounty of nature and the vast extent of land made careful and systematic methods of culture or care of cattle seem unnecessary to the colonist, and he consequently adopted wasteful and extravagant practices. These are described by our best if severest critic.

The products of North Carolina are rice, tobacco, indigo, cotton, wheat, peas, beans, Indian corn, and all sorts of roots, especially potatoes. Rice is not so much cultivated here as in South Carolina; but in the latter they raise no tobacco, whereas in North Carolina it is one of their chief articles. It grows in the northerly parts of the

[1] *American Husbandry.* By an American (London, 1775), I, 331–2, 337–8, 349.

province, on the frontiers of Virginia, from which colony it is exported. Indigo grows very well in the province, particularly in the southern parts, and proves a most profitable branch of culture. Cotton does very well, and the sort is so excellent, that it is much to be wished they had made a greater progress in it. The greatest articles of their produce which is exported are tar, pitch, turpentine, and every species of lumber, in astonishing quantities. . . .

The two great circumstances which give the farmers of North Carolina such a superiority over those of most other colonies, are, first, the plenty of land; and, secondly, the vast herds of cattle kept by the planters. The want of ports, as I said, kept numbers from settling here, and this made the land of less value, consequently every settler got large grants; and, falling to the business of breeding cattle, their herds became so great, that the profit from them alone is exceeding great. It is not an uncommon thing to see one man the master of from 300 to 1200, and even to 2000 cows, bulls, oxen, and young cattle; hogs also in prodigious numbers. Their management is to let them run loose in the woods all day, and to bring them up at night by the sound of a horn: sometimes, particularly in winter, they keep them during the night in enclosures, giving them a little food, and letting the cows and sows to the calves and pigs; this makes them come home the more regularly. Such herds of cattle and swine are to be found in no other colonies; and when this is better settled, they will not be so common here; for at present the woods are all in common, and people's property has no other boundary or distinction than marks cut in trees, so that the cattle have an unbounded range; but when the country becomes more cultivated, estates will be surrounded by enclosures, and consequently the numbers of cattle kept by the planters will be proportioned to their own lands only. . . .

The system pursued here is as faulty as in most other parts of America; it consists in cropping the land with tobacco as long as it will bear it; then they will take two crops of maize, and after that throw in wheat, peas, &c. for several years longer; after which they leave the land to become forest again; as fast as they want more, they take it from the old woodland, serving it in the same manner. It is owing to this wretched system that many of their corn-fields are so full of weeds, that in some it is difficult to know what is the crop.

INDUSTRY

I. General Description

State of the British Plantations in America, in 1721 [1]

A detailed account of the boundaries, government, population, products, industries, militia, and revenue of the various American colonies for the year 1721 was furnished in an elaborate report of the Lords Commissioners for Trade and Plantations. Those parts only which relate to the population, products, and industries are here reprinted.

Copy of a Representation of the Lords Commissioners for Trade and Plantations to the King upon the State of His Majesties Colonies & Plantations on the Continent of North America, dated September the 8th 1721.

To the King's Most Excellent Majesty.

May it please your Majesty.

In obedience to your Majesty's commands, we have prepared the following state of your Majesty's Plantations on the Continent of America; wherein we have distinguished their respective situations, Governments, strengths and Trade, and have observed of what importance their Commerce is to Great Britain, . . .

Your Majesty's Plantations on the Continent of America, beginning from the North, are Nova Scotia, New Hampshire, Massachusetts, Rhode Island, Connecticut, New York, New Jersey, Pensylvania, Maryland, Virginia, & Carolina. . . .

NEW HAMPSHIRE

. . . . Lumber, Fish, Masts for the Royal Navy, & Turpentine are the chief produce of this Province; they build some ships, but not so many since the last war as before; they have some mines, which produce very good Iron, tho' but little of it hath been hitherto forged; there are likewise great quantities of Stone, in which 'tis believed there may be silver. The annual produce of these commodities is very uncertain, the price falling & rising according to the demand there is for them, seldom exceeding £50,000 per Annum of New England money.

This Province would produce hemp & flax if proper encouragement were given for it, & the people had good seed for the first sowing.

[1] *Documents relative to the Colonial History of the State of New York.* Edited by E. B. O'Callaghan (Albany, 1855), V, 591–630.

They export their Lumber, & some part of their fish to the neighbouring Governments of the West Indies, & to the Western Islands, from whence they get their Wines. They likewise have sent some Lumber, tar & Turpentine of late to this Kingdom, in exchange for linnen & woolen manufactures; but they have some supplies of this kind from Ireland also, either directly or by way of other plantations. Their best & most merchantable fish is exported to Portugal & Italy & the produce of it generally remitted to this Kingdom except what is returned in Salt for the fishery.

Their fishing is much increased since the Peace with France, but the Lumber trade decreased, by reason of the low price it bears in the West Indies, & the little encouragement there is to send it to this Kingdom, because of the duties on that commodity here.

The Ships, trading directly from this Province to foreign parts, are now very few, not exceeding 20 in number, but they have about 100 fishing vessels, & the number of sea faring men is near 400, tho' many of them not settled Inhabitants there; and there are no manufactures carried on in this Province. . . .

MASSACHUSETTS BAY

. . . . The products of this Country proper for the consumption of this Kingdom, are timber, turpentine, tar & pitch, masts, pipe & hogshead staves, whale fins & oil, & some furs. They supply Spain, Portugal, & the West Indies with considerable quantities of fish & Lumber. We are likewise informed, that they have mines of several kinds, which might be wrought upon proper encouragement.

Their Trade to the foreign plantations in America consists chiefly in the Exportation of Horses to Surinam, and (as we are informed) to Martinico, & the other french Islands, which is a very great discouragement to the Sugar planters in the British Islands; for without these supplies, neither the french nor the Dutch could carry on their sugar works to any great degree; & in return for their Horses, they receive Sugar, molasses & rum.

In this Province there are all sorts of Common Manufactures. The Inhabitants have always worked up their own wool into coarse Cloths, druggets, & serges; but these, as well as their homespun linnen, which is generally half cotton, serve only for the use of the meanest sort of people. A great part of the Leather used in the Country is also manufactured among themselves; some hatters have lately set up their trade in the principal Towns; & several Irish families, not long since arrived, & settled, to the Eastward, make

good Linnen & diaper; however, the excessive price of labour enhances the value of all their manufactures.

It is therefore to be presumed that necessity, & not choice, has put them upon erecting manufactures; not having sufficient commodities of their own to give in exchange for those they do receive already from Great Britain; & the most natural method of curing this evil would be to allow them all proper encouragement for the importation of Naval Stores, & minerals of all kinds.

The branch of Trade which is of the greatest importance to them, & which they are best enabled to carry on, is the building of Ships, Sloops, &c. And according to our advices from thence, they have annually launched from 140 to 160 vessels of all sorts, which at 40 tons one with another, amount to 6000 Tons; & altho' the greatest part are built for account of, or sold to the Merchants of this Kingdom, & in the plantations, nevertheless there belongs to this Province about 190 sail, which may contain 8,000 tons, & are navigated with about 1,100 men, besides 150 boats, with 600 men, employed in the fisheries on their own Coast.

Their Iron works which were erected many years past, furnish them with small quantities of iron for common use, but the iron imported from this Kingdom, being esteemed much better, is generally used in their shipping. . . .

RHODE ISLAND

. . . . As to the number of inhabitants in this Colony their trade & state of their Government, we have but very imperfect accounts; & indeed the Misfeazances of this & most of the other proprietary Governments are so numerous, that we shall not trouble your Majesty with them in this place, but will take leave to give our humble opinion concerning them in the concluding part of this representation.

CONNECTICUT

. . . . This government is upon the same foot as Rhode Island, under the same regulations of Government, & liable to the same inconveniences.

NEW YORK

. . . . The natural produce of this Country consists in provisions, which are sent to the British Islands in the West Indies; in Horses sent to Surinam, Curaçoa, & S^{t} Thomas, & in Whale-oil, & peltry to this Kingdom; besides some Naval stores, which this Country is

capable of producing in very great quantities, if proper measures were taken for this purpose. . . .

This province could likewise furnish iron in great quantities. It has some Copper & lead, but at a great distance from the British, & amongst the Indian Settlements. There are Coal Mines in Long Island, which has not yet been wrought.

The several Commodities, exported from this Kingdom to New York, have at a medium of three years, commonly amounted to about £50,000 a year. The imports from thence have not, upon the same medium, risen higher than £16,000 a year; so that the balance in favour of this Kingdom, as far as can be judged of it by the Custom house accounts, has been upwards of £25,000 a year.

The Vessels belonging to this province are small, & not considerable in number; being employed only in carrying provisions[1] to the Southern Islands, and in the coasting trade to the Neighbouring colonies on the Continent.

The number of the inhabitants in this province increases daily; chiefly from New England, & from the North of Ireland. The militia consists of 6000 men. . . .

NEW JERSEY

. . . . This province produces all sorts of grain or corn, the inhabitants likewise breed all sorts of Cattle, in great quantities, with which they supply the Merchants of New York & Philadelphia, to carry on their trade, to all the American Islands; but were they a distinct Government, (having very good harbours) merchants

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[1] [A later report (New York Col. Doc., V, 686.) explained more fully what was included in this item, "provisions":]

The Staple Commodity of the Province is Flower & Bread, which is sent to all Parts of the West Indies we are allowed to trade with, Besides Wheat, Pipe Staves & a little Bees Wax to Madeira. We send likewise a considerable quantity of Pork, Bacon, Hogshead Staves, some Beef Butter & a few Candles to the West Indies. The great bulk of our Commoditys in proportion to their value, is the reason we cannot Trade directly to the Spanish Coast as they do from the West Indies it being necessary to employ armed vessels to prevent Injuries from the Spaniards & Pirates but we sometimes send vessels into the Bays of Campechie & Honduras, to purchase Logwood & we have it imported from thence frequently by Strangers. This commodity is entirely exported again for England. . . .

Several of our Neighbours up on the continent cannot well subsist without our assistance as to Provisions for we yearly send Wheat & Flower to Boston & Road Island as well as to South Carolina tho in any great quantity Pensylvania only rivals us in our Trade to the West Indies, but they have not that Credit in their Manufactures that this Province has.

would be encouraged to settle amongst them, & they might become a considerable trading people; whereas, at present, they have few or no ships, but coasting vessels, & they are supplied from New York & Philadelphia with English Manufactures having none of their own.

The Inhabitants daily increase in great numbers from New England & Ireland; and before this increase, the militia consisted of about 3000 men. . . .

PENNSYLVANIA

. . . . The natural produce of this Country is wheat, beef, pork, & lumber. Their Trade consequently consists chiefly in the exportation of these to the several parts of the west Indies, & Madieras; from whence; in return, they take rum, sugar, Cotton, Spanish money, & wine. They likewise build many Brigantines & Sloops for sale; but having few or no manufactures of their own, they are supplied therewith from Great Britain, to the yearly value of about 20,000£. And as this province does greatly abound in iron, so we have good grounds to believe, that, if proper encouragement was given in Great Britain, to take off that, & their timber, the people would thereby be diverted from the thoughts of setting up any manufactures of their own, & consequently the consumption of those of Great Britain considerably advanced. For it must be observed, that this Plantation is in a very flourishing condition; greatly increased in its inhabitants; & altho' the informations we have received touching their numbers, differ extremely, some computing them at about 60,000 whites & 5,000 blacks, & others not above half that number; yet they all agree in their opinion, concerning the flourishing state of this Colony, & that the produce of their commodities may well be reckoned at 100,000£ per Annum.

Four fifths of the inhabitants of this province being Quakers, there is little care taken of their Military affairs. . . .

MARYLAND

. . . . The number of Inhabitants was computed in the year 1704. to be 30,537 men, women & children, & 4,475 slaves young & old, in all 35,012.

In the year 1710 was computed 34,796, whites, & 7,935 negroes, in all 42,741.

And in the year 1719. was computed 55,000 white inhabitants, & 25,000 blacks, in all 80,000.

From whence it appears, that the Inhabitants of this province have increased to above double the number in 15 years, & altho' some part of this increase may have been occasioned by the transportation of the rebels from Preston, by the purchase of slaves, as well as by the arrival of several convict persons, & of many poor families, who have transported themselves from Ireland; yet it must be allowed, that Maryland is one of the most flourishing provinces upon the Continent of America. . . .

Tobacco is the staple commodity of this province of which about 30. or 35,000 hogsheads are yearly exported to Great Britain. The inhabitants export some tobacco to the other plantations, as also grain, beef, pork, & lumber, for which they have in return rum & sugar.

They likewise send some corn to the Madeiras for wine, but the most part of the wine they have from thence is purchased by bills of Exchange.

Whilst tobacco answers, in its price, the planter's labour, all manufactures, & all other trade, that might arise from the product of the Country are laid aside.

The Inhabitants wear the like cloathing, & have the same furniture within their houses with those in this Kingdom. The Slaves are cloathed with Cottons, Kerseys, flannel, & coarse linnens, all imported; & it is computed that this province consumes of British Manufactures to the value of £20,000 per annum.

No mines are yet discovered here, except iron, which are very common, but not wrought, for want of a sufficient stock, & persons of skill to engage in such an undertaking.

The number of ships belonging to this province, are only four small Brigantines, & not more than 20 Sloops for the Sea; the inhabitants not being inclined to navigation, but depending upon British bottoms for the exportation & importation of the bulk of their trade; & there has been employed of late years above 100 sail of ships from Great Britain.

VIRGINIA

. . . . The principal product of Virginia is tobacco; & in general it's of a better quality than that of Maryland. Before the conclusion of the last peace with France, the Virginia planters exported to this Kingdom at least 30,000 hogsheads per Annum; but about that time, the trade declining, for want of foreign consumption, an Act was passed in the 12th of Her late Majesty's reign for encouraging the

tobacco trade, & your Majesty hath been since graciously pleased to give your Royal Assent to an Act for continuing the same. . . .

The other branches of the trade between this kingdom & Virginia consist in pitch & tar, pipe & hogshead staves, skins & furrs, & a few drugs. They also export to the other Plantations some small quantities of tobacco, provisions, & lumber; but their dependence is almost wholly on the produce of tobacco. . . .

NORTH CAROLINA

. . . . There are great tracts of good land in this Province, & it is a very healthy country; but the situation renders it forever incapable of being a place of considerable trade, by reason of a great Sound near sixty miles over, that lies between the Coast & the Sea, barred by a vast Chain of Sand-banks, so very shallow & shifting, that sloops, drawing only five foot water, run great risk in crossing them.

The little Commerce therefore driven to this Colony, is carried on by very small Sloops, chiefly from New England; who bring them Clothing & Iron ware, in exchange for their pork & Corn: but of late, they have made small quantities of pitch & tar, which are first exported to New England, & thence to Great Britain.

We are not thoroughly informed of the number of inhabitants; but according to the best accounts we could get, the number of persons in their tythables, or poll-tax, were not long since above 1600, of which about one third were blacks. . . .

SOUTH CAROLINA

. . . . The trade of this Province, with respect to their own shipping is not hitherto very considerable; the inhabitants not having above 20 sail of their own, amounting to about 1500 ton; & as they chiefly apply themselves to the plantation work, they have not many sea faring men, but their trade is carried on by the Merchants of Great Britain, who reap a considerable advantage thereby.

The commodities the people of Carolina take from Great Britain, are all manner of Cloathing, woollen linnen, iron ware, brass & pewter, & all sorts of household goods, having no manufactures of their own; & their southerly situation will make them always dependent on Great Britain for a supply of these commodities, whose consumption may be computed at about £23,000 per Annum; besides the cost of a considerable number of Negroes, with which the British Mer-

chants have for some time furnished them yearly, taking their returns in rice, & naval stores.

There is a small trade carried on between Carolina & the Madeiras for wine; & the Commissioners of the Customs have a Surveyor General, a Collector, a Comptroller, a Searcher, a Waiter, & a Naval Officer, to put the laws of trade & Navigation in execution here: But daily experience shews, that illegal trade is not to be prevented in a proprietary Government.

The natural produce of this Country is Rice, pitch, tar, turpentine, buck-skins, furs, corn, beef, pork, soap, myrtle-wax, candles, various sorts of lumber, as Masts, cedar-boards, staves, shingles, and hoop-poles; but the soil is thought capable of producing wine, oil, silk, indigo, pot-ashes, iron, hemp, & flax.

The number of white inhabitants in this province has some time since been computed at 9000; & the blacks at 12,000, But the frequent massacres committed of late years by the neighbouring Indians, at the instigation of the French & Spaniards, have diminished the white men, whilest the manufacture of pitch & tar has given occasion to increase the number of black slaves, who have lately attempted, and were very near succeeding in a new revolution, which would probably have been attended by the utter extirpation of all your Majesty's subjects in this province; & therefore it may be necessary for your Majesty's service, that the Governor should be instructed to propose some law to the Assembly there, for encouraging the entertainment of more white servants for the future. . . .

THE CONSEQUENCE OF THE PLANTATION TRADE

Thus having gone through the several Colonies on the Continent, in order to demonstrate the consequence their trade is of to Great Britain; we have drawn out from the Custom House books an Account N° 1. containing the total amount or value of all goods imported from, & exported to the said Colonies, communibus Annis, on a medium of three years from Christmas 1714 to Christmas 1717. . . .

From this Account it will appear, that the plantations in America take from hence yearly to the value of one million sterling, in British products & Manufactures, & foreign goods.

And although the exports charged in this account to the several Colonies on the continent, amount to no more than £431,027. 16^{s}. 5^{d} yet as the Continent has undoubtedly a great share in the General

article of entry to the West Indies, as well as in the articles of entry to Africa and the Madeiras, the exports to the Continent may well be computed at £500,000.

But before we enter into the particular circumstances of the plantation trade on the Continent, it will be necessary to ascertain the principal commodities, wherein their trade consists, & how much they respectively amount to; which will appear, Account N° 2.

It may be observed from this Account, that the exports to the Continent of America exceed the imports from thence about £200,000 per annum; which debt falls upon the provinces to the Northward of Maryland; who probably are enabled to discharge the same, by the trade they are permitted to carry on in America, & to Europe, in commodities not enumerated in the Acts of Trade, . . .

There still remains to be considered another great advantage that arises to this Kingdom from the plantation trade, which is, the constant employment it gives to our British Shipping. . . .

It is very probable, that the trade which is carried on between England and the American plantations employs at least one fourth part of the Shipping annually cleared from this kingdom.

And upon casting up the tonnage of the plantation products re-exported in the year 1717, it appears there was employed near half as much Shipping, in transporting these goods from hence to Germany, Holland, & other foreign countries, as was employed in the trade directly from the British Colonies in America.

Consequently therefore it may be concluded, that about one third part of the Shipping employed in the foreign trade of this Kingdom is maintained by the plantation trade.

But notwithstanding the advantages, at present arising from the Plantation trade, are so very considerable, it is not to be doubted, but that they might still be rendered much more useful, if sufficient encouragement were given to induce them to turn their industry to the production of Naval Stores, of all kinds, & of such other commodities as our necessities require, & which are purchased by us with great disadvantage from foreign Countries; from whence this convenience, amongst many others, would naturally result,— That the more Northern Colonies would be thereby enabled to pay their balance to England, without lying under the necessity of carrying on a trade to foreign parts, in some respects detrimental to their mother Kingdom.

No. 1.

The total value of the Imports from				The total value of the Exports to		
£	s	d		£	s	d
65,016	7	2	New England	139,269	14	6
22,607	16	4	New York	50,314	6	6
5,051	7	00	Pennsylvania	20,176	14	2
92,675	10	6		209,760	15	2
250,994	10	6	Virginia & Maryland	198,276	4	9
38,906	16	1	Carolina	22,987	16	6

No. 2.

The principal imports from New England, New York, Pennsylvania, Virginia, Maryland, and Carolina, are as follows.

	£	s	d	
In skins & furrs	17,340	14	10	Products of the Indian Trade
Turpentine	12,082	19	5	
Pitch and tar	34,990	00	00	
Train oil	7,680	18	7	of the sd Plantations
Whalefins	3,679	14	3	
Tobacco	236,588	18	1	
Rice	19,206	18	4	
Sugar, brown	9,834	7	3	of foreign Plantations
Logwood	21,060	6	4	of Campeche
	362,464	17	1	
In all other Goods	20,112	00	00	
The total import according to the aforesd Genl account	382,576	17	1	per annum
But the Tobacco being overvalued about	80,000	00	00	
The said import cannot amount to more than	302,576	17	1	per annum

No. 3.

And the principal exports to the said provinces are as follows.

In British Manufacture & Products,	£	s	d
Woollen Manufactures	147,438	11	7
Silk wrought & thrown	18,468	7	1
Linnens & sail cloth	11,464	9	00
Cordage	11,284	5	9
Gunpowder	2,392	15	5
Leather wrought, & saddles	15,161	12	6
Brass & copper wrought	2,565	6	7
Iron wrought & nails	35,631	13	6
Lead & shot	2,850	9	3
Pewter	3,687	6	11
In many other goods	43,941	5	6
	294,886	3	1
In Foreign Goods.			
Linnens	86,413	00	00
Callicoes	10,102	4	00
Prohibited East India Goods	10,523	12	9
Wrought Silks	1,189	11	1
Iron & Hemp	6,152	5	11
In other foreign goods	21,760	19	9
Foreign Goods	136,141	13	6
British Goods	294,886	3	1
The said Exports amounts to according to the aforesaid general account (per annum)	431,027	16	7
But as it has been always mentioned, the total export might probably amount to at least (per annum)	500,000	00	00

All which is most humbly submitted.

J. Chetwynd.
P. Doeminique.
M. Bladen.
E. Ashe.

Whitehall
Sep^{r} 8. 1721

II. Extractive Industries

A. *Products of the Forest, 1650* [1]

To the pioneer settler the clearing of the densely wooded land presented a task of overwhelming proportions. While we regard the forests today as a source of wealth which we are beginning to conserve more carefully, to the colonist they were a hindrance to be got rid of as soon and as thoroughly as possible. The author of the tract from which the following extract is taken was trying to persuade settlers to emigrate to America, so he pointed out some of the ways in which the forest products could be turned to account in the process of clearing the land.

The objection, that the Countrey is overgrowne with Woods, and consequently not in many Yeares to bee penetrable for the Plough, carries a great feeblenesse with it. For there are an immense quantity of Indian fields cleared already to our hand by the Natives, which till wee grow over populous may every way be abundantly sufficient, but that the very clearing of ground carries an extraodinary benefit with it, I will make apparent by these following Reasons.

1. If wee consider the benefit of Pot-ashes growne from ten to fifty pound in the Tunne, within these twenty Yeares, and in all probability likely to encrease by reason of interdicting Trade betwixt us and the Muscovite, from whence we used to supply our selves; We shall finde the employment of that very Staple will raise a considerable summe of Money, and no man so imployed can (if industrious) make his labour less than one hundred pound, *per annum:* For if wee consider that those who labour about this in England give twelve pence the bushell for Ashes, if wee consider to how many severall parts of the Countrey they are compelled to send man and horse before they can procure any quantity to fall to worke upon; if wee consider some of the thriftiest, and wise, and understanding men, sell Wood on purpose for this Commodity, and yet notwithstanding this Brigade of difficulties finde their Adventures and Labours answered with a large returne of profit, wee who have all these things already at our owne doore without cost, may with a confidence grounded upon reason expect an advantage much greater, and clearer profit.

Nor can wee admit in discretion, that a large quantity of those should not finde a speedy Market, since the decay of Tymber is a defect growne universall in Europe, and the Commodity such a necessary Staple, that no civill Nation can be conveniently without it.

[1] *Virginia.* By E. W. Gent (London, 1650). In Force, Tracts and Other Papers (Washington, 1844, 4 vols.), III, no. xl, 13–14.

Nor are Pipestaves and Clapboard a despicable commodity, of which one man may with ease make fifteen thousand yearely, which in the countrey it selfe are sold for 4 l. in the *Canaries* for twenty pound the thousand, and by this means the labour of one man will yeeld him 60 l. *per annum*, at the lowest Market. If all this be not sufficient to remove the incumbrance of Woods, the Saw mill may be taken into consideration, which is in every respect highly beneficiall by this Timber for building houses, and shipping may be more speedily prepared, and in greater quantity by the labour of two or three men, then by a hundred hands after the usuall manner of sawing.

The Plankes of Walnut-trees for Tables or Cubbords, Cedar and Cypresse, for Chests, Cabinets, and the adorning magnificent buildings, thus prepared will be easily transported into England, and sold at a very considerable value.

But that in which there will be an extraordinary use of our woods is the Iron mills, which if once erected will be an undecaying Staple, and of this forty servants will by their labour raise to the Adventurer foure thousand pound yearely: Which may easily be apprehended if wee consider the deerenesse of Wood in England, where notwithstanding this great clog of difficulty, the Master of the Mill gaines so much yearely, that he cannot but reckon himselfe a provident Saver.

B. *Naval Stores in South Carolina, 1699* [1]

Edward Randolph was sent over to America by the king as a special agent to report on the acts of trade. In this report he urges the encouragement of naval stores in South Carolina.

. . . . My Lords, I did formerly present Your Lordships with proposals for supplying England with Pitch & Tar, Masts & all o^r^ Naval Stores from New England. I observed when I were at York in Sept^r^. last, abundance of Tar bro^t^. down Hudson's River to be sold at New York, as also Turpentine & Tar in great quantities from the Colony of Connecticut, I was told if they had encouragement they could load several Ships yearly for England. But since my arrival here I find I am come into the only place for such commodities upon the Continent of America; some persons have offered to deliver in Charlestown Bay upon their own account 1000 Barrels of

[1] *A Sketch of the History of South Carolina.* By W. J. Rivers. (Charleston, 1856), 445–6.

Pitch and as much Tar, others greater quantities provided they were paid for it in Charles Town in Lyon Dollars passing here at 5^{s}. p^{r}. piece, Tar at 8^{s}. p^{r}. Barrel, and very good Pitch at 12^{s}. p^{r}. Barrel, & much cheaper if it once became a Trade. The season for making those Commodities in this Province being 6 mo^{s}. longer than in Virginia and more Northern Plantations; a planter can make more tar in any one year here with 50 slaves than they can do with double the number in those places, their slaves here living at very easy rates and with few clothes.

C. *Shipbuilding in Massachusetts, 1607–1724*[1]

There are many references in contemporary writings to the growth of ship-building in New England during the colonial period, but nowhere do we find a description of this industry. Thus we read in Rev. William Hubbard's quaint *General History of New England*, written about 1680, that "the people of New England at this time [1646] began to flourish much in building of ships and trafficking abroad, and had prospered very well in those affairs," but no further details are given. The following extract brings together much of the available information on this subject. The author was a captain in the United States navy.

Undoubtedly the first vessel of size sufficient to navigate the ocean, launched from the shores of New England, was "a faire pinnace of thirty tons," called the *Virginia*, which, according to Strachey, was built by the Popham colony at the mouth of the Kennebec in 1607, thirteen years before the landing of the pilgrims at Plymouth, and which made a successful voyage across the Atlantic the same year.

Twenty-four years after this, on the 4th of July, 1631, was launched the *Blessing of the Bay*, the first vessel built in the colony of Plymouth. . . .

Ten years later, viz., Jan. 24, 1641, Edward Banks launched at Plymouth a bark of 40 or 50 tons, estimated to cost £200, and which is recorded as the first vessel of size built in that colony. Hence the *Blessing of the Bay* must have been of less tonnage. . . .

The importance of ship-building to the colony, immediately following the launch of Bang's vessel, received the attention of the pilgrim fathers, and accordingly on the 4th of October, 1641, the same year that witnessed her launch, we find them enacting the following law:

[1] *Early Ship-building in Massachusetts*. By George Henry Preble. In The New-England Historical and Genealogical Register and Antiquarian Journal (Boston, 1869), XXIII, 38–41; XXV, 15–16, 127.

"Whereas the building of ships is a business of great importance for the common good, and therefore suitable care ought to be taken that it be well performed, according to the commendable course of England and other places: It is therefore ordered by this court and the authority thereof; that when any ship is to be built within this jurisdiction, or any vessel above thirty tons, the owner, or builder in his absence, shall before they begin to plank, repair to the governor or deputy governor, or any two magistrates, upon the penalty of ten pounds, who shall appoint some able man to survey the work and workmen from time to time as is usual in England, and the same so appointed shall have such liberty and power as belongs to his office. . . .

"And those viewers shall have power to cause any bad timber, or other insufficient work or material to be taken out and amended at the charge of them through whose default it grows." [1] . . .

These vessels were all ships of size for those days, though they would be but the merest cockle-shells of our times. We of the present generation cannot realize the little cock boats in which navigators traversed the ocean between two and three centuries ago. Could the navigators of those days revisit the earth, they would be amazed at the improvements in size, construction, comfort and security of the ships of our time. Hume relates that, in 1582, of twelve hundred and thirty-two vessels belonging to the kingdom of Great-Britain, but two hundred and seventeen were over eighty tons burthen. A vessel of forty tons, he says, was considered a large vessel, and in 1587 there were not five vessels in all England whose size exceeded 200 tons. Only one of the vessels which composed the squadron of Columbus, in 1492, had a deck, and the remainder, according to Irving, were not superior to the smallest class of modern coasting vessels. On his third voyage, when coasting the gulf of Para, Columbus complained of the size of his ship, it being nearly 100 tons burthen. The Mayflower, which in 1620 brought over the Pilgrim fathers, was but 180 tons, and the Half Moon, as the boat in which Henrick Hudson discovered New-York bay in 1609 was called, was but 80 tons. . . .

In 1676, there had been, according to Hutchinson, constructed in Boston and its vicinity, and then belonged to ports in its neighborhood: —

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[1] *Ancient Laws and Charter of Massachusetts Bay*, published by order of the General Court, ed. of 1814, p. 189.

30	vessels	of	between	100	and	250	tons,
200	"	"	"	50	"	100	"
200	"	"	"	30	"	50	"
300	"	"	"	6	"	10	"

In 1714–17, Massachusetts had 492 vessels, with an aggregate of 25,406 tons, and employing 3,493 seafaring men. . . .

There is no subject connected with the first century of the history of New-England, about which so little is known as of the small vessels employed in navigating its waters. Of the small craft employed by our ancestors in their coasting, fishing and trading voyages, our information is hardly sufficient even to enable the imagination to represent satisfactorily their form and appearance when under sail. We know that they had shallops, sloops, pinnaces, barks and ketches; but concerning the masts, spars, rigging and sails of these vessels, it may be said we know nothing . . .

In 1698 Lord Bellomont says: "Last year I examined the Registers of all the vessels in the three provinces of my government; and found there then belonged to the town of Boston 25 ships from 100 tons to 300; ships about 100 tons and under, 38; brigantines, 50; ketches, 13; and sloops, 67; in all, 194 vessels. To New-Hampshire at that time 11 ships of good burthen, 5 brigantines, 4 ketches and 4 sloops." . . . "I believe I may venture to say there are more good vessels belonging to the town of Boston, than to all Scotland and Ireland, unless one should reckon the small craft, such as herring boats." [1] . . .

Various attempts were made to counteract ship-building in the province. Oct. 19, 1724, a petition was laid before the Lords of Plantations by sixteen master builders, against the encouragement of ship-building in New-England. Of their reasons, one was, that their journeymen were drawn to this country; and another, that there would not be a sufficiency of ships for the royal navy, in case of need. The petitioners belonged to London.

D. *Fur Trade Gained by the French, 1755* [2]

With the increase of population and the killing off of the fur-bearing animals in the region east of the Alleghanies, the French were able to secure to themselves

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[1] *Bellomont Papers*, p. 790. — See Provincial Papers, New-Hampshire. Vol. II. Part 1. 1628–1722.

[2] *Observations on the late and present conduct of the French, with regard to their encroachments upon the British Colonies in North America.* By William Clarke (Boston, 1755), 14–16.

the larger part of the fur trade with the Indians in the Mississippi country. The rivalry over the fur trade was indeed one of the immediate causes which led to the French and Indian War in 1756.

But to return from these occasional Remarks, and to point out the Consequences of the present Measures of the *French*, if they are suffered to pursue them:

The first and most immediate will be the engrossing the whole Furr and Pelt Trade. The Furrs and Pelts imported into *England*, have been commuted to amount to about 90,000 *l.* Sterling *per Annum*, besides what are used in the Plantations, which is no inconsiderable Quantity, but I believe greatly exceed that Sum. What Part is imported from *North-America*, and what from the Northern Parts of *Europe*, I cannot tell. The whole *Indian* Trade of *North-America* is carried on entirely by Barter; and that chiefly, and indeed almost wholly for Strouds, Duffils, Blankets, and other Manufactures of *Great-Britain*. . . .

The Pelts and Furrs imported into *France*, amounted some Years ago to no less than 135,000 *l.* Sterling *per Annum;* and since that Time the *French* Trade in those Commodities has been continually encreasing, whilst that of the *English* has been diminishing; and in a little Time will, very probably, nay, must necessarily be entirely lost to the *English* and gained by the *French*, if the latter are suffered to continue possessed of their present Encroachments, and to strengthen themselves in them.

E. *Fishing in New England, 1624*[1]

That the wealth of the colonists of New England lay in the fishing industry rather than in cultivating a sterile soil or in trying to develop artificial industries was early seen by such a shrewd observer as Captain John Smith. All the early writers agree in describing the enormous quantities of fish in American waters, and the following extract probably does not exaggerate the situation.

The main staple from hence to be extracted for the present, to produce the rest, is fish, which howbeit may seem a mean and a base commodity, yet who will but truly take the pains and consider the sequel, I think will allow it well worth the labour. . . .

In March, April, May, and half June, here is cod in abundance; in May, June, July, and August, mullet and sturgeon, whose roes does make caviary and puttargo, herring if any desire them; I have

[1] *Generall Historie of Virginia, New England and the Summer Isles, 1584–1624.* By Captain John Smith (London, 1624). In Pinkerton, Voyages and Travels, XIII, 213, 215–6.

taken many out of the bellies of cods, some in nets; but the savages compare the store in the sea with the hairs of their heads; and surely there are an incredible abundance upon this coast. In the end of August, September, October and November, you may have cod again to make core-fish or poor-john; hake you may have when the cod fails in summer, if you will fish in the night, which is better than cod. Now each hundred you take here is as good as two or three hundred in Newfoundland; so that half the labour in hooking, splitting and towing is saved: and you may have your fish at what market you will, before they have any in Newfoundland, where their fishing is chiefly but in June and July, where it is here in March, April, May, September, October, and November, as is said; so that by reason of this plantation, the merchants may have their freight both out and home, which yield an advantage worth consideration. Your core-fish you may in like manner transport as you see cause, to serve the ports in Portugal, as Lisbon, Avera, Porta-Port, and divers others (or what market you please), before your islanders return: they being tied to the season in the open sea, and you having a double season, and fishing before your doors, may every night sleep quietly ashore with good cheer, and what fires you will, or when you please, with your wives and family: they only and their ships in the main ocean, that must carry and contain all they use, besides their freight. The mullets here are in that abundance you may take them with nets sometimes by hundreds, where at Cape Blank they hook them; yet those are but a foot and a half in length; these two, three, r four, as oft I have measured, which makes me suspect they are some other kind of fish, though they seem the same, both in fashion and goodness. Much salmon some have found up the rivers as they have passed, and here the air is so temperate as all these at any time may be preserved. Now, young boys and girls, savages, or any other, be they never such idlers, may turn, carry, or return a fish, without either shame, or any great pain: he is very idle, that is past twelve years of age, and cannot do so much; and she is very old, that cannot spin a thread to make engines to catch a fish.

F. *Advantages of American Fisheries, 1790*[1]

The close proximity to the United States of the Newfoundland Banks, where the best fishing was to be had, gave the American fisheries an initial advantage

[1] *Statistical Annals . . . of the United States of America.* By Adam Seybert. (Philadelphia, 1818), 335–6.

over all competitors except the Canadians, but other factors which are enumerated in the following extract, made us probably the foremost fishing nation in the world at the end of the eighteenth century.

. . . It was supposed, that the people of the United States possessed many advantages over those of other nations; in some respects this was true; and as such, the Secretary of State [Thomas Jefferson], enumerated the following; viz.

1. The neighbourhood of the great fisheries, which permits our fishermen to bring home their fish, to be salted by their wives and children.

2. The shore fisheries, so near at hand as to enable vessels to run into port in a storm, and to lessen the risk, for which distant nations must pay an insurance.

3. The winter fisheries, which, like household manufactures, employ portions of time which would otherwise be useless.

4. The smallness of the vessels which the shortness of the voyage enables us to employ; and which, consequently, requires but a small capital.

5. The cheapness of our vessels; which do not cost above the half of the Baltic fir vessels, computing price and duration.

6. Their excellence as sea boats; which decreases the risk, and facilitates the returns.

7. The superiority of our mariners, in skill, activity, enterprise, sobriety, and order.

8. The cheapness of provisions.

9. The cheapness of casks; which, of itself, is said to be equal to an extra profit of 15 per cent.

III. Manufacturing Industries

A. *Colonial Manufactures, 1732* [1]

The English Board of Trade and Plantations every few years sent a long list of queries to the colonial governors concerning, among other things, the trade and manufactures of the colonies. The answers to these questions probably constitute our most valuable source of information as to the commerce and industrial development of the various colonies. A much condensed account of colonial manufactures for the year 1732 is herewith presented.

Pursuant to an order of the British House of Commons, directed to the Lords Commissioners of Trade and Plantations, in the latter

[1] *Report of the Lords Commissioners for Trade and Plantations to the House of Commons, 1732.* In Anderson, An Historical and Chronological Deduction of the Origin of Commerce (4 vols., London, 1787), III. 190–4.

end of the last or the beginning of this same year 1732, relating to the dispute still subsisting between the sugar colonies and the northern continental colonies of America; the said board reported, with respect to any laws made, manufactures set up, or trade carried on there, detrimental to the trade, navigation, or manufactures of Great Britain, as follows, viz. . . .

"That in New England, New York, Connecticut, Rhode Island, Pennsylvania, and in the county of Somerset in Maryland, they had fallen into the manufacture of woollen cloth and linen cloth, for the use of their own families only.

"For, first, The product of those colonies being chiefly stock," *i. e.* cattle, "and grain, the estates of the inhabitants depended wholly on farming, which could not be managed without a certain quantity of sheep, so that their wool would be entirely lost were not their servants employed during the winter in manufacturing it for the use of their families.

"Secondly, That flax and hemp being likewise easily raised, the inhabitants manufactured them into a coarse sort of cloth bags, traces, and halters, for their horses; which they found did more service than those they had from any part of Europe. That, however, the height of wages and high price of labour in general in America rendered it impracticable for people there to manufacture their linen cloth at less than twenty per cent. more than the rate in England, or woollen cloth at less than fifty per cent. dearer than that which is exported from hence for sale. It were to be wished, that some expedient might be fallen upon to divert their thoughts from undertakings of this nature: so much the rather, because those manufactures, in process of time, may be carried on in a greater degree, unless an early stop be put to their progress, by employing them in naval stores. . . .

"I. *New Hampshire.*

"The governor, in his answer, said, That there were no settled manufactures in that province, and that their trade principally consisted in lumber and fish.

"II. *Massachusett's Bay*, in New England.

"The governor informed us, that in some parts of this province, the inhabitants worked up their wool and flax into an ordinary coarse cloth, for their own use; but did not export any. That the greatest part of both woollen and linen cloathing worn in this prov-

ince was imported from Great Britain, and sometimes from Ireland. But, considering the excessive price of labour in New England, the merchants could afford what was imported cheaper than what was made in that country.

"That there were also a few hatters set up in the maritime towns: and that the greater part of the leather used in that country was manufactured amongst themselves. That there had been for many years some iron-works in that province, which had afforded the people iron for some of their necessary occasions; but that the iron imported from Great Britain was esteemed much the best, and wholly used by the shipping. And that the iron works of that province were not able to supply the twentieth part of what was necessary for the use of the country.

"III. *New York.*

"That they had no manufactures in that province that deserved mentioning; their trade consisting chiefly in furs, whale-bone, oil, pitch, tar, and provisions.

"IV. *New Jersey.*

"No manufactures here that deserve mentioning: their trade being chiefly in provisions exported to New York and Pennsylvania.

"V. *Pennsylvania.*

"Its chief trade lay in the exportation of provisions and lumber; having no manufactures established; their cloathing and utensils for their houses being all imported from Great Britain.

"VI. From *New Hampshire*, further advices, viz.

"That the woollen manufacture of this province is much less than formerly; the common lands on which the sheep used to feed, being now divided into particular properties, and the people almost wholly cloathed with woollen from Great Britain. That the manufacturing of flax into linen (some coarser, some finer) daily increased by the great resort of people from Ireland thither, who are well skilled in that business. And that the chief trade of this province continued, as for many years past, in the exportation of naval stores, lumber, and fish.

"VII. Later accounts from *Massachuset's Bay*, in New England, viz.

"The assembly have voted a bounty of thirty shillings for every piece of duck or canvas to be made in this province. — Some other

manufactures are carried on there; as the making of brown Hollands, for womens wear; which lessens the importation of calicoes, and some other sorts of East India goods. — They also make some small quantities of cloth made of linen and cotton, for ordinary shirting and sheeting. — By a paper-mill, set up three years ago, they make to the value of two hundred pounds yearly. — There are also several forges for making of bar iron, and some furnaces for cast iron, or hollow wares, and one slitting mill: — and a manufacture of nails.

"The governor writes, concerning the woollen manufacture, that the country people who used formerly to make most of their cloathing out of their own wool, do not now make a third part of what they wear, but are mostly cloathed with British manufactures.— The governor (Belcher) by some of his letters of an older date, in answer to our annual queries, writes, that there are some few copper mines in this province, but so far distant from water carriage, and the ore so poor, that it is not worth the digging. — The Surveyor General of his Majesty's woods writes, that they have in New England six furnaces and nineteen forges for making of iron: — and that in this province many ships are built for the French and Spaniards, in return for rum, melasses, wines, and silk, which they truck there by connivance. — Great quantities of hats are made in New England, of which the Company of Hatters of London have likewise lately complained to us. — That great quantities of those hats are exported to Spain, Portugal, and our West India islands. — They also make all sorts of iron-work for shipping.— That there are several still-houses and sugar bakers established in New England.

"VIII. Later advices from *New York*, viz.

"There are no manufactures here that can affect the manufactures of Great Britain. — There is yearly imported into New York a very large quantity of the woollen manufactures of this kingdom, for their cloathing, which, 'as the President of the Council of this province writes,' they would be rendered incapable to pay for, and would be reduced to the necessity of making for themselves, if they were prohibited from receiving from the foreign sugar colonies, the money, rum, sugar, melasses, cocoa, cotton-wool, &c. which they at present take in return for provisions, horses, and lumber, the produce of that province and of New Jersey; of which, he affirms, the British sugar colonies do not take off above one-half.

But the Company of Hatters of London have since informed us, that hats are manufactured in great quantities in this province.

"IX. *New Jersey.*

"No particular returns from this province.

"X. From *Pennsylvania*, later advices, viz.

"The deputy-governor writes, that he does not know of any trade carried on in that province that can be injurious to this kingdom: and that they do not export any woollen or linen manufactures: all that they make, which are of a coarse sort, being for their own use. We are further informed, that in this province are built many brigantines and small sloops, which they sell to the West Indies.

"XI. *Rhode Island.*

"The governor informs us, in answer to our queries, that there are iron mines there; but not a fourth part iron enough to serve their own use. But he takes no notice of any sort of manufactures established there.

"XII. *Connecticut.*

"No return from the governor of this province." . . . "But," says this report of the Board of Trade, "we find by some accounts, that the produce of this colony is timber, boards, all sorts of English grain, hemp, flax, sheep, black cattle, swine, horses, goats, and tobacco. — That they export horses and lumber to the West Indies, and receive in return sugar, salt, melasses, and rum. — We likewise find, that their manufactures are very inconsiderable; the people there being generally employed in tillage; some few in tanning, shoe-making, and other handicrafts; others in building, joiners, taylors and smiths work, without which they could not subsist."

"No report is made concerning Carolina, the Bahama, nor the Bermuda isles: and as for Newfoundland, it is scarcely to be called a plantation, and Hudson's Bay not at all. . . .

"From the foregoing state," continues the report, "it is observable that there are more trades carried on and manufactures set up in the provinces on the continent of America to the northward of Virginia, prejudicial to the trade and manufactures of Great Britain, particularly in New England, than in any other of the British colonies; which is not to be wondered at; for their climate,

soil, and produce, being pretty near the same with ours, they have no staple commodities of their own growth to exchange for our manufactures; which puts them under greater necessity, as well as under greater temptation of providing for themselves at home: to which may be added, in the charter governments, the little dependence they have upon their mother-country, and consequently the small restraints they are under in any matters detrimental to her interests.

"And therefore, we would humbly beg leave to report and submit to the wisdom of this Honourable House, the substance of what we formerly proposed in our report on the silk, linen, and woollen manufactures herein before recited; namely, whether it might not be expedient to give those colonies proper encouragements for turning their industry to such manufactures and products as might be of service to Great Britain, and more particularly to the production of all kinds of naval stores.

"*Whitehall, Feb.* 15, 1731–2. PAUL DOCKMINIQUE, &c."

B. *Few Manufactures in New York, 1732* [1]

The following extract is a good example of a report from a governor who was friendly to the colonists and who minimized the growth of manufacturing in the colonies and the infraction of the acts of trade. Cosby was governor of New York.

New York. 18. Dec^{r} 1732.

My Lords, . . .

I acknowledge the receipt of your Lord^{pps} to me of the 16th of June last, and in pursuance of His Maj$^{ty's}$ directions to Your Lord^{pps}'s Board have made the strictest enquiry in respect to Manufacturers sett up, and Trade carryed on in this Province of New York and can discover none that may in any way affect or prejudice the Trade, Navigation and Manufactures of the Kingdom of Great Brittain; . . . The Inhabitants here are more lazy and unactive that the world generally supposes, and their manufacture extends no further then what is consumed in their own famillys, a few coarse Lindsey Woolseys for cloathing, and linen for their own wear; the hatt makeing trade here seemed to promise to make the greatest advances to the prejudice of Great Brittain, but that the Parliament having already taken into their consideration, needs no more mention, whatever new springs up that may in the least affect and prejudice the Trade or Navigation of Great

[1] *Documents relative to the Colonial History of the State of New York.* Edited by E. B. O'Callaghan (Albany, 1855), V, 937–8.

Brittain shall be narrowly inspected and Annual returns of Your Lord^pps Querries constantly sent — In the mean time I have the honour to be with the greatest respect imaginable — My Lords,

Your Lord^pps most obedient
and most humble servant.
(signed). W Cosby

C. *Manufactures in New York, 1767* [1]

The slight development of manufacturing establishments and the difficulties which the manager of such enterprises had to cope with in the uncertainty of labor and the competition of the cheaper and better English goods are clearly brought out in this report of Governor H. Moore of New York to the Lords of Trade.

There is a small Manufactory of Linen in this City under the Conduct of one Wells, and supported chiefly by the Subscriptions of a set of men who call themselves the Society of Arts and Agriculture. No more than fourteen Looms are employed in it, and it was established in order to give Bread to several poor families which were a considerable charge to the City, and are now comfortably supported by their own daily Labour in spinning of Flax. It does not appear, that there is any established fabric of Broad cloth here; and some poor Weavers from Yorkshire, who came over lately in expectation of being engaged to make Broad cloths, could find no Employment. But there is a general Manufactory of Woollen carried on here, and consists of two sorts, the first a coarse cloth entirely woollen $\frac{3}{4}$ of a yard wide; and the other a Stuff which they call Linsey Woollsey. The Warp of this Linen and the Woof Woollen; and a very small quantity of it is ever sent to market. Last year when the Riots and Disorders here were at their height, on the occasion of the Stamp Act, these manufactures were greatly boasted of, and the Quantity then made greatly magnified by those, who were desirous of distinguishing themselves as American Patriots, and would wear nothing else; they were sometimes sold for three times their value; but the manufacturers themselves shewed, that they had more good sense than the persons who employed them; for they never cloathed themselves with the work of their own hands, but readily brought it to market, and selling it at an extravagant price there, bought English cloth for themselves and their families. The custom of making these coarse cloths in private families prevails throughout

[1] *Documents relative to the Colonial History of New York.* Edited by E. B. O'Callaghan. (Albany, 1856–1887), VII, 888–9.

the whole Province, and almost in every house a sufficient quantity is manufactured for the use of the Family, without the least design of sending any of it to market. This I had an opportunity of seeing during the late Tour I made, and had the same Accounts given me by all those persons, of whom I made any enquiries, for every house swarms with children, who are set to work as soon as they are able to Spin and card; and as every family is furnished with a Loom, the Itinerant Weavers who travel about the Country, put the finishing hand to the work.

There is a Manufactory of Hats in this City, which is very considerable; for the Hats are not so good as those made in England, and are infinitely dearer. Under such Disadvantages as these it is easy to imagine with what difficulty it is supported, and how short the duration of it is like to be; the Price of Labour is so great in this part of the World that it will always prove the greatest obstacle to any manufactures attempted to be set up here, and the genius of the People in a Country where every one can have Land to work upon leads them so naturally into Agriculture that it prevails over every other occupation. There can be no stronger Instances of this, than in the servants Imported from Europe of different Trades; as soon as the Time stipulated in their Indentures is expired, they immediately quit their Masters and get a small tract of Land in settling which for the first three or four years they lead miserable lives, and in the most abject Poverty; but all this is patiently borne and submitted to with the greatest cheerfulness, the Satisfaction of being Land holders smooths every difficulty, and makes them prefer this manner of living to that comfortable subsistance which they could procure for themselves and their families by working at the Trades in which they were brought up.

The Master of a Glass-house; which was set up here a few years ago, now a Bankrupt, assured me that his ruin was owing to no other cause than being deserted in this manner by his servants, which he had Imported at a great expence; and that many others had suffered and been reduced as he was by the same Kind of Misfortune.

The little Foundry lately set up near this Town, for making small Iron Potts is under the direction of a few private persons, and as yet very inconsiderable.

As to the Foundaries which M^{r} Hansenclaver has set up in the different parts of this Country, I do not mention them, as he will be able to give your Lordships a full account of them and of the progress

he has already made; I can only say that I think this Province is under very great obligations to him for the large Sums of Money he has paid out here in promoting the cultivation of Hemp and introducing the valuable manufactures of Iron and Pot-Ash.

D. *Domestic Manufacturing in New England, 1761* [1]

Many of the industries which are now carried on in factories and which produce by machinery in large quantities for sale in a market, were at one time carried on within the household by hand methods and for family consumption. The so-called domestic manufactures of the colonies were of this kind, and were widespread, especially in New England and the middle colonies. The English government never objected to domestic production for family use, though it did forbid manufacturing textiles, hats, or iron and steel for sale. Consequently the colonists throughout the entire colonial period carried on these household industries, of which the textile industry was the most important.

They are almost the only one of our colonies which have much of the woollen and linen manufactures. Of the former they have nearly as much as suffices for their own cloathing. It is a close and strong, but a coarse and stubborn sort of cloth. A number of Presbyterians from the North of Ireland, driven thence, as it is said, by the severity of their landlords, from an affinity in religious sentiments chose New-England as their place of refuge. Those people brought with them their skill in the linen manufactures, and meeting with very large encouragement, they exercised it to the great advantage of this colony. At present they make large quantities, and of a very good kind; their principal settlement is in a town, which in compliment to them is called Londonderry. Hats are made in New-England, which, in a clandestine way, find a good vent in all the other colonies. The setting up of these manufactures has been in a great measure a matter necessary to them; for as they have not been properly encouraged in some staple commodity, by which they might communicate with their mother country, while they were cut off from all other resources, they must either have abandoned the country, or have found means of employing their own skill and industry to draw out of it the necessaries of life. The same necessity, together with their convenience for building and manning ships, has made them the carriers for the other colonies.

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[1] *European Settlements in America.* By Edmund Burke (London, 1761), II, 174–5.

TRADE

I. Trade between England and British Colonies in America

An Early View of Colonial Trade, 1729[1]

The difference between the southern and northern colonies in their relation to English trade is clearly indicated in this selection. The tobacco plantations and other southern colonies sent to England staples which she desired for herself or which furnished the basis for a lucrative trade with Europe — "the surest way of enriching this Kingdom." The northern colonies, on the other hand, while they bought largely from England, could send few of their own products in return and were therefore forced to secure the means of payment by trade with other countries, or to manufacture for themselves. Consequently the southern colonies were preferred during the earlier colonial period, when the colonies were regarded chiefly as a source of materials. The writer was a Mercantilist, who believed in the regulation of trade and industry by the government.

Chap. XV.

TRADE *between* England *and the* Tobacco Plantations.

THE *Tobacco Plantations* take from *England* their Cloathing, Household Goods, Iron Manufactures of all Sorts, Saddles, Bridles, Brass and Copper Wares, and notwithstanding their dwelling among the Woods, they take their very Turner's Wares, and almost every Thing else that may be called the Manufacture of *England:* So that indeed it is a very great Number of People that are employed to provide a sufficient Supply of Goods for them.

ENGLAND takes from them not only what Tobacco we consume at Home, but very great Quantities for Re-exportation, which may properly be said to be the surest Way of enriching this Kingdom.

Chap. XVI.

TRADE *between* England *and* Carolina.

Carolina lies in as happy a Climate as any in the World, from 32 to 36 Degrees of *Northern* Latitude. The Soil is generally fertile: The Rice it produces is said to be the best in the World, and no Country affords better Silk than has been brought from thence, though for Want of sufficient Encouragement the Quantity imported is very small. . . . The Rice Trade, since it hath been made an enumerated Commodity, is under great Discouragement; for it can-

[1] *The Trade and Navigation of Great Britain considered: shewing that the surest way for a Nation to increase in Riches, is to prevent the Importation of such Foreign Commodities as may be rais'd at Home.* By Joshua Gee (London, 1729), 20–25.

not be sent directly to Portugal and Spain as formerly; and it will not bear the Charge of bringing home and Re-shipping, unless it be at a Time when the Crops in the Milanese and Egypt prove bad. . . .

Chap. XVII.

TRADE *between* England *and* Pensilvania.

Pensilvania within Forty Years has made wonderful Improvements; they have built a large and regular City, they have cleared great Tracts of Land, and raised very great Quantities of Wheat and other Provisions, and they have by Way of *Jamaica* beat out a very great Trade for their Corn and Provisions to the *Spanish West-Indies;* and if this Trade be properly nurs'd up, it may draw the *Spanish* Coast very much to depend on us for a Supply of Flower, Bisket, &c. which may be of great Advantage to us.

It is already attended with that good Consequence, that it hath supplied them with Gold and Silver, which is frequently brought home by our trading Ships from thence, and has very much enlarged their Demands upon us for Broad-cloth, Kersies, Druggets, Serges, Stuffs, and Manufactures of all Sorts.

They supply the *Sugar Plantations* with Pipes and Barrel-Staves, and other Lumber, with Flower, Bisket, Pork, &c. But this is not sufficient for their Cloathing, and therefore are forced to make something by their own Labour and Industry to answer that End.

Chap. XVIII.

TRADE *between* England, New-Jersey *and* New-York.

THE Provinces of *New-Jersey* and *New-York* produce much the same with *Pensilvania*, and their Traffic is much the same; we have what Money they can raise to buy our Manufactures for their Cloathing, and what they further want, they are forced to manufacture for themselves as the aforesaid Colonies do.

Chap. XIX.

TRADE *between* England *and* New-England.

NEW-ENGLAND takes from us all Sorts of Woollen Manufactures, Linnen, Haberdashery, &c. To raise Money to pay for what they take of us, they are forced to visit the *Spanish* Coasts, where they pick up any commodity they can trade for: They carry Lumber and Provisions to the Sugar Plantations, exchange Provision for Logwood with the Logwood Cutters at *Campeachey*. They send Pipe and Barrel-

Staves and Fish to *Spain*, *Portugal*, and the *Streights*. They send Pitch, Tar and Turpentine to *England*, with some Skins: But all those Commodities fall very short of purchasing their Cloathing in *England;* and therefore what other Necessaries they want, they are forced to manufacture for themselves, as the aforementioned Colonies.

II. New England

A. *Commerce of New England, 1748* [1]

Owing partly to the sterility of the soil and partly to the colonial policy of the mother country, by which the natural products of the country were denied access to English ports, the energies of New England were diverted from the channels of agriculture to those of commerce. Since this section of the American colonies lay in the same climatic zone as England itself, and therefore produced much the same things, the natural products of New England were for the most part placed among the non-enumerated articles, which could not be sent to England. The residents of New England were forced, consequently, either to find other markets for their goods, or to engage in other industries. In the fisheries, shipbuilding, and the carrying trade they found the most profitable occupations, and with the profits from these were able to purchase large quantities of manufactured goods from England. The following extract gives a brief account of New England commerce, showing the important products.

The goods which are shipped to London from New England are the following: all sorts of fish caught near Newfoundland and elsewhere; train-oil of several sorts; whalebone, tar, pitch, masts, new ships, of which a great number is annually built, a few hides, and sometimes some sorts of wood. The English islands in America, as Jamaica and Barbadoes, get from New England, fish, flesh, butter, cheese, tallow, horses, cattle; all sorts of lumber, such as pails, buckets, and hogsheads; and have returns made in rum, sugar, molasses, and other produces of the country, or in cash, the greatest part of all which they send to London (the money especially) in payment of the goods received from thence; and yet all this is insufficient to pay off the debt.

B. *Carrying Trade of New England, 1761* [2]

In this extract there is emphasized the part which the shipping of New England played in the carrying trade. The profits of New England ship builders and owners

[1] *Travels into North America.* By Peter Kalm (London, 1771). In Pinkerton, Voyages and Travels (London, 1812), XIII, 439.

[2] *European Settlements in America.* By Edmund Burke (London, 1761), II, 173–7, *passim.*

came from the sale of their vessels and also from their use as carriers. Burke justifies this trade on the ground that the profits were ultimately spent for English manufactures, which otherwise could not have been bought.

That we may be enabled to form some judgment of the wealth of this city, [Boston] we must observe that from Christmas 1747, to Christmas 1748, five hundred vessels cleared out from this port only, for a foreign trade; and four hundred and thirty were entered inwards; to say nothing of coasting and fishing vessels, both of which are extremely numerous, and said to be equal in number to the others. Indeed the trade of New-England is great, as it supplies a large quantity of goods from within itself; but it is yet greater, as the people of this country are in a manner the carriers for all the colonies of North America and the West-Indies, and even for some parts of Europe. They may be considered in this respect as the Dutch of America.

The commodities which the country yields are principally masts and yards, for which they contract largely with the royal navy; pitch, tar, and turpentine; staves, lumber, boards; all sorts of provisions, beef, pork, butter and cheese in large quantities; horses and live cattle; Indian corn and pease; cyder, apples, hemp and flax. Their peltry trade is not very considerable. They have a very noble cod fishery upon their coast, which employs a vast number of their people: they are enabled by this to export annually above thirty-two thousand quintals of choice cod fish, to Spain, Italy, and the Mediterranean, and about nineteen thousand quintals of the refuse sort to the West-Indies, as food for the negroes. The quantity of spirits, which they distil in Boston from the molasses they bring in from all parts of the West-Indies, is as surprising as the cheap rate at which they vend it, which is under two shillings a gallon. With this they supply almost all the consumption of our Colonies in North America, the Indian trade there, the vast demands of their own and the Newfoundland fishery, and in great measure those of the African trade; but they are more famous for the quantity and cheapness, than for the excellency of their rum. . . .

The business of ship-building is one of the most considerable which Boston or the other sea-port towns in New-England carry on. Ships are sometimes built here upon commission; but frequently, the merchants of New England have them constructed upon their own account; and loading them with the produce of the colony, naval stores, fish, and fish-oil principally, they send them out upon a trading voyage to Spain, Portugal, or the Mediterranean; where, having disposed of their cargo, they make what advantage they

can by freight, until such time as they can sell the vessel herself to advantage, which they seldom fail to do in a reasonable time. They receive the value of the vessel, as well as of the freight of the goods, which from time to time they carried, and of the cargo with which they sailed originally, in bills of exchange upon London; for as the people of New England have no commodity to return for the value of above a hundred thousand pounds, which they take in various sorts of goods from England, but some naval stores, and those in no great quantities, they are obliged to keep the balance somewhat even by this circuitous commerce, which, though not carried on with Great Britain nor with British vessels, yet centers in its profits, where all the money which the colonies can make in any manner must center at last.

I know that complaints have been made of this trade, principally because the people of New-England, not satisfied with carrying out their own produce, become carriers for the other colonies, particularly for Virginia and Maryland, from whom they take tobacco, which in contempt of the act of navigation, they carry directly to the foreign market. Where not having the duty and accumulated charges to which the British merchant is liable to pay, they in a manner wholly out him of the trade. Again, our sugar colonies complain as loudly, that the vast trade which New England drives in lumber, live stock, and provisions, with the French and Dutch sugar islands, particularly with the former, enables these islands, together with the internal advantages they possess, greatly to undersell the English plantations. That, the returns which the people of New England make from these islands being in sugar, or the productions of sugar, syrups, and molasses, the rum which is thence distilled prevents the sale of our West-India rum. That this trade proves doubly disadvantageous to our sugar islands; first, as it enables the French to sell their sugars cheaper than they could otherwise afford to do; and then as it finds them a market for their molasses, and other refuse of sugars, for which otherwise they could find no market at all; because rum interferes with brandy, a considerable manufacture of Old France.

C. *Exports of New England, 1763*[1]

The extent to which the fisheries contributed to the wealth of New England, and its importance in the foreign trade of that section are both shown by this extract.

I shall conclude this account, with a table of the exports of this province since the peace [of 1763].

[1] *American Husbandry.* By an American (London, 1775), I, 59–61.

Cod-fish dried, 10,000 tons, at 10 l.	£100,000
Whale and cod-oil, 8500 tons, at 15 l.	127,500
Whale-bone, 28 tons, at 300 l.	8,400
Pickled mackerel and shads, 15,000 barrels at 20s.	15,000
Masts, boards, staves, shingles, &c.	75,000
Ships about 70 sail, at 700 l.	49,000
Turpentine, tar, and pitch, 1500 barrels, at 8s.	600
Horses, and live stock,	37,000
Pot-ash, 14,000 barrels, at 50s.	35,000
Pickled beef and pork, 19,000 barrels, at 30s.	28,500
Bees-wax, and sundries,	9,000
Total	£485,000

Upon this table I must observe, that the fishery amounts to 250,900 l. of it; or rather more than half the total, which shews what a great proportion of the people of this colony are employed in it. The other half is the produce of their lands, for so both ships and pot-ash must be esteemed; Cattle and beef, pork, &c. came to 65,500 l. all the rest is timber or what is made of timber; this is a proportion that gives us at once a tolerable idea of the colony. We are not from hence to suppose, that the great body of the landed interests in this country has, like Canada, no other resource to purchase foreign commodities with, than this small export. The case is very different, New England enjoys a vast fishery, and a great trade, which brings in no slight portion of wealth. The most considerable commercial town in all America is in this province; and another circumstance is the increase of population. These causes operate so as to keep up a considerable circulation within the colony. Boston and the shipping are a market which enriches the country interest far more than the above mentioned export, which, for so numerous a people, is very inconsiderable. By means of this internal circulation, the farmers and country gentlemen are enabled very amply to purchase whatever they want from abroad.

III. Middle Colonies

A. *Foreign Trade of New York, 1748*[1]

The commerce of the middle colonies steadily increased, and in time both New York and Philadelphia passed Boston as important seaports. The middle colonies carried on a trade as extensive as that of New England, but made up to a greater extent of agricultural products, such as provisions of every sort. Peter Kalm, with his characteristic thoroughness, gives a clear picture of the foreign trade of New York in the middle of the 18th century.

[1] *Travels into North America.* By Peter Kalm (London, 1771). In Pinkerton, Voyages and Travels (London, 1812), XIII, 458–9.

New York probably carries on a more extensive commerce than any town in the English North American provinces; at least it may be said to equal them; Boston and Philadelphia however come very near up to it. The trade of New York extends to many places; and it is said they send more ships from thence to London than they do from Philadelphia. They export to that capital all the various sorts of skins which they buy of the Indians, sugar, logwood, and other dying woods, rum, mahogany, and many other goods which are the produce of the West Indies; together with all the specie which they get in the course of trade. Every year they build several ships here, which are sent to London, and there sold; and of late years they have shipped a quantity of iron to England. In return for these, they import from London stuffs, and every other article of English growth or manufacture, together with all sorts of foreign goods. England, and especially London, profits immensely by its trade with the American colonies; for not only New York, but likewise all the other English towns on the continent, import so many articles from England, that all their specie, together with the goods which they get in other countries, must altogether go to Old England, in order to pay the amount, to which they are however insufficient. From hence it appears how much a well-regulated colony contributes to the increase and welfare of its mother country.

New York sends many ships to the West Indies, with flour, corn, biscuit, timber, tuns, boards, flesh, fish, butter, and other provisions; together with some of the few fruits that grow here. Many ships go to Boston in New England, with corn and flour; and take in exchange, flesh, butter, timber, different sorts of fish, and other articles, which they carry further to the West Indies. They now and then take rum from thence, which is distilled there in great quantities, and sell it here with a considerable advantage. Sometimes they send yachts with goods from New York to Philadelphia, and at other times yachts are sent from Philadelphia to New York, which is only done, as appears from the gazettes, because certain articles are cheaper at one place than at the other. They send ships to Ireland every year, laden with all kinds of West India goods, but especially with linseed, which is reaped in this province. I have been assured that in some years no less than ten ships have been sent to Ireland, laden with nothing but linseed, because it is said the flax in Ireland does not afford good seed; but probably the true reason is this; the people of Ireland, in order to have the better flax, make use of the plant before the seed is ripe, and therefore are obliged to

send for foreign seed; and hence it becomes one of the chief articles in trade.

At this time a bushel of linseed is sold for eight shillings of New York currency, or exactly a piece of eight.

The goods which are shipped to the West Indies are sometimes paid for with ready money, and sometimes with West India goods, which are either first brought to New York, or immediately sent to England or Holland. If a ship does not chuse to take in West India goods in its return to New York, or if nobody will freight it, it often goes to Newcastle in England, to take in coals for ballast, which when brought home sell for a pretty good price. In many parts of the town coals are made use of, both for kitchen fires, and in rooms, because they are reckoned cheaper than wood, which at present costs thirty shillings of New York currency per fathom; of which measure I have before made mention. New York has likewise some intercourse with South Carolina; to which it sends corn, flour, sugar, rum, and other goods, and takes rice in return, which is almost the only commodity exported from South Carolina.

The goods with which the province of New York trades are not very numerous. They chiefly export the skins of animals which are bought of the Indians about Oswego; great quantities of boards, coming for the most part from Albany; timber and ready-made lumber, from that part of the country which lies about the river Hudson; and lastly, wheat, flour, barley, oats, and other kinds of corn, which are brought from New Jersey and the cultivated parts of this province. I have seen yachts from New Brunswick, laden with wheat which lay loose on board, and with flour packed up in tuns; and also with great quantities of linseed. New York likewise exports some flesh and other provisions out of its own province, but they are very few; nor is the quantity of pease, which the people about Albany bring, much greater. Iron however may be had more plentifully, as it is found in several parts of this province, and is of a considerable goodness; but all the other products of this country are of little account.

Most of the wine, which is drank here and in the other colonies, is brought from the isle of Madeira, and is very strong and fiery.

No manufactures of note have as yet been established here; at present they get all manufactured goods, such as woollen and linen cloth, &c. from England, and especially from London.

The river Hudson is very convenient for the commerce of this city; as it is navigable for near an hundred and fifty English miles up the country, and falls into the bay not far from the town, on its

western side. During eight months of the year this river is full of yachts, and other greater and lesser vessels, either going to New York or returning from thence, laden either with inland or foreign goods.

I cannot make a just estimate of the ships that annually come to this town or sail from it. But I have found, by the Pensylvania gazettes, that from the first of December in 1729, to the fifth of December in the next year, two hundred and eleven ships entered the port of New York, and two hundred and twenty-two cleared it; and since that time there has been a great increase of trade here.

B. *Exports of New York and Pennsylvania, 1763–1766* [1]

An interesting and probably fairly reliable estimate of the actual value of the exports from New York after the conclusion of the Seven Years' War is here given. It should be noted that practically everything is the product of the extractive industries, and four-fifths are derived from agriculture.

I shall next lay before the reader the exports of this province [New York] as taken on an average of three years since the peace [of 1763].

Flour and biscuit 250,000 barrels, at 20s.	£250,000
Wheat 70,000 qrs.	70,000
Beans, pease, oats, Indian corn and other grains,	40,000
Salt beef, pork, hams, bacon, and venison,	18,000
Bees wax, 30,000 lb. at 1s.	1,500
Tongues, butter, and cheese,	8,000
Flax seed, 7000 hhds. at 40s.	14,000
Horses and live stock	17,000
Product of cultivated lands,	418,500
Timber planks, masts, boards, staves, and shingles	25,000
Pot ash, 7000 hhds.	14,000
Ships built for sale, 20, at £700.	14,000
Copper ore, and iron in bars and pigs	20,000
	£526,000

Let me upon this table observe, that far the greater part of this export is the produce of the lands including timber; and even the metals may be reckoned in the same class; this shews us that agriculture in New York is of such importance as to support the most considerable part of the province without the assistance of either the fishery or of commerce; not that the city of New York has not traded largely, perhaps equal to Boston, but the effects of that trade have been chiefly the introduction of money by the means of barter, besides the exportation of their own products: whereas New England's exports consist five parts in six of fish, and the other products of

[1] *American Husbandry.* By an American (London, 1775), I, 124–5, 181–2.

the fishery; a strong proof that agriculture is far more profitable in one country, than in the other; for settlers in colonies will never take to the sea, in a country whose agriculture yields well; but in very bad climates, and such as destroy instead of cherishing the products of the earth, any branch of industry pays better than cultivating the earth....

Before I conclude this chapter, I shall insert a table of the exports of the province [Pennsylvania].

Biscuit flour, 350,000 barrels, at 20s.....	£350,000
Wheat, 100,000 qrs. at 20s.....	100,000
Beans, pease, oats, Indian corn, and other grain,..	12,000
Salt beef, pork, hams, bacon, and venison,.....	45,000
Bees wax, 20,000 lb. at 1s.....	1,000
Tongues, butter, and cheese,.....	10,000
Deer, and sundry other sorts of skins,.....	50,000
Live stock and horses,.....	20,000
Flax seed, 15,000 hhds. at 40s.....	30,000
Timber plank, masts, boards, staves, and shingles	35,000
Ships built for sale, 25, at £700.....	17,500
Copper ore, and iron in pigs and bars,.....	35,000
Total	£705,500

Upon this account I must observe, that far the greatest part is the cultivated produce of the land; which is the very contrary to New England, whose lands yield nothing to export. In proportion to this circumstance, is the value of a colony, for it is the nature of colonization, that the people ought, on first principles, to support themselves by agriculture alone. Wheat appears to be the grand export of this province: that, and other articles of food, amount to above half a million, which is a vast sum of money to export regularly, besides feeding every rank of people in the utmost plenty; but of late years this has risen to much more, for wheat, instead of being at 20s. a quarter, is at above 30s. No circumstance in the world can be more strong, in proof of the temperature, moderation and healthiness of the climate, than this of exporting such quantities of wheat, which throughout the globe, thrives nowhere in climates insalubrious to mankind:...

IV. Southern Colonies

A. *Report on Virginia, 1671* [1]

A forceful and characteristic report was made by Governor William Berkeley in response to a request from the British Lords Commissioners of Trade and Plantations for information as to conditions in Virginia in 1671. Berkeley was well qualified to speak, for he was governor of that province from 1641 to 1677.

[1] *Statutes at Large; being a Collection of All the Laws of Virginia.* By W. W. Hening (New York, 1823), II, 514–7.

12. What commodities are there of the production, growth and manufacture of your plantation; and particularly, what materials are there already growing, or may be produced for shipping in the same?

Answer. Commodities of the growth of our country, we never had any but tobacco, which in this yet is considerable, that it yields his majesty a great revenue; but of late, we have begun to make silk, and so many mulberry trees are planted, and planting, that if we had skilfull men from Naples or Sicily to teach us the art of making it perfectly, in less than half an age, we should make as much silk in an year as England did yearly expend three score years since; but now we hear it is grown to a greater excess, and more common and vulgar usage. Now, for shipping, we have admirable masts and very good oaks; but for iron ore I dare not say there is sufficient to keep one iron mill going for seven years. . . .

18. What number of ships do trade yearly to and from your plantation, and of what burthen are they?

Answer. English ships, near eighty come out of England and Ireland every year for tobacco; few New England ketches; but of our own, we never yet had more than two at one time, and those not more than twenty tuns burthen.

19. What obstructions do you find to the improvement of the trade and navigation of the plantations within your government?

Answer. Mighty and destructive, by that severe act of parliament which excludes us the having any commerce with any nation in Europe but our own, so that we cannot add to our plantation any commodity that grows out of it, as olive trees, cotton or vines. Besides this, we cannot procure any skilfull men for one now hopefull commodity, silk; for it is not lawfull for us to carry a pipe stave, or a barrel of corn to any place in Europe out of the king's dominions. If this were for his majesty's service or the good of his subjects, we should not repine, whatever our sufferings are for it; but on my soul, it is the contrary for both. And this is the cause why no small or great vessells are built here; for we are most obedient to all laws, whilst the New England men break through, and men trade to any place that their interest lead them.

20. What advantages or improvements do you observe that may be gained to your trade and navigation?

Answer. None, unless we had liberty to transport our pipe staves, timber and corn to other places besides the king's dominions. . . .

23. What course is taken about the instructing the people, within

your government in the christian religion; and what provision is there made for the paying of your ministry?

Answer. The same course that is taken in England out of towns; every man according to his ability instructing his children. We have forty eight parishes, and our ministers are well paid, and by my consent should be better *if they would pray oftener and preach less.* But of all other commodities, so of this, *the worst are sent us*, and we had few that we could boast of, since the persicution in *Cromwell's* tiranny drove divers worthy men hither. But, I thank God, *there are no free schools* nor *printing*, and I hope we shall not have these hundred years; for *learning* has brought disobedience, and heresy, and sects into the world, and *printing* has divulged them, and libels against the best government. God keep us from both!

B. *Exports of the Southern Colonies, 1763*[1]

The author of *American Husbandry* was a thorough-going Mercantilist who approved of the southern colonies because they exported to England "true staples" and did not compete with her, while he equally disapproved of the commerce of the New England colonies. The proportion which tobacco and rice form of the total exports should be noted in these tables.

To shew the vast importance of these colonies [Virginia and Maryland] to Great Britain, it will be necessary to lay before the reader the last accounts of their exports [1763?], from which we shall also see what proportion their common husbandry bears to their tobacco.

Tobacco, 96,000 hogsheads, at 8 l.	£768,000
Indian corn, beans, pease, &c.	30,000
Wheat, 40,000 quarters, at 20s.	40,000
Deer and other skins	25,000
Iron in bars and pigs	35,000
Sassafras, snake-root, ginseng, &c.	7,000
Masts, plank, staves, turpentine, and tar	55,000
Flax-seed, 7000 hogsheads, at 40 s.	14,000
Pickled pork, beef, hams, and bacon	15,000
Ships built for sale, 30 at 1000 l.	30,000
Hemp 1000 tons at 21 l. (besides 4000 tons more and 2000 of flax worked up for their own use)	21,000
Total	1,040,000

Upon this table I must observe once more, how extremely important these colonies are to the mother country. To raise above a million sterling, the greatest part of which are true staples, and the

[1] *American Husbandry.* By an American (London, 1775), I, 256–7; II, 32–3.

rest necessary for the West Indies, with no fish, whale bone, oil, &c. commodities which some of the colonies have run away with from Britain, by rivalling her in her fishery — possessing no manufactures, even to such a degree that all attempts to bring the people into towns have proved vain. By manufactures, I mean those for sale; for as to private families working wool, hemp, and flax for their own use, it is what many do all over America, and are necessitated to do, for want of money and commodities to buy them. A colony so truly important, I say, deserves every attention from the mother country, and every encouragement to induce settlers to fix in it. . . .

The following is a state of the exports of Georgia, upon an average of three years since the peace [of 1763].

	£
18000 barrels of rice, at 40s	36,000
Indigo, 17000 lb. at 2s	1,700
Silk, 2500 lb. at 20s	2,500
Deer and other skins	17,000
Boards, staves, &c.	11,000
Tortoise-shell, drugs, cattle, &c.	6,000
	£ 74,200

CHAPTER III

LABOR, EXCHANGE, AND POPULATION, 1607–1763

LABOR

I. Scarcity of Labor

A. *High Wages in Pennsylvania, 1698* [1]

Owing to the large extent of practically free land in the colonies and the ease with which an industrious man could establish himself as an independent farmer, very few persons were content to remain as hired laborers. Hence labor — that is hired labor — was scarce throughout the whole of the colonial period, and wages were high. Wages were high both because labor was scarce, and also because it was very productive and the employer could afford to pay high wages. The writer was for seventeen years a resident of a Quaker settlement.

Labouring-Men have commonly here [Pennsylvania], between 14 and 15 Pounds a Year, and their Meat, Drink, Washing and Lodging; and by the Day their Wages is generally between Eighteen Pence and Half a Crown, and Diet also; But in Harvest they have usually between Three and Four Shillings each Day, and Diet. The Maid Servants Wages is commonly betwixt Six and Ten Pounds per Annum, with very good Accommodation. And for the Women who get their Livelihood by their own Industry, their Labour is very dear, for I can buy in London a Cheese-Cake for Two Pence, bigger than theirs at that price when at the same time their Milk is as cheap as we can buy it in London, and their Flour cheaper by one half.

Corn and Flesh, and what else serves Man for Drink, Food and Rayment, is much cheaper here than in England, or elsewhere; but the chief reason why Wages of Servants of all sorts is much higher here than there, arises from the great Fertility and Produce of the Place; besides if these large Stipends were refused them, they would quickly set up for themselves, for they can have Provision very cheap,

[1] *An Historical and Geographical Account of the Province and Country of Pensilvania* (London, 1698). By Gabriel Thomas. In Original Narratives of Early American History. Edited by J. F. Jameson (New York, 1910), XIII, 328–9. Printed by permission of the editor and the publishers, Charles Scribner's Sons.

and Land for a very small matter, or next to nothing in comparison of the Purchace of Lands in England; and the Farmers there, can better afford to give that great Wages than the Farmers in England can, for several Reasons very obvious.

As First, their Land costs them (as I said but just now) little or nothing in comparison, of which the Farmers commonly will get twice the encrease of Corn for every Bushel they sow, that the Farmers in England can from the richest Land they have.

In the Second place, they have constantly good price for their Corn by reason of the great and quick vent into Barbadoes and other Islands; through which means Silver is become more plentiful than here in England, considering the Number of People, and that causes a quick Trade for both Corn and Cattle; and that is the reason that Corn differs now from the Price formerly, else it would be at half the Price it was at then; for a Brother of mine (to my own particular knowledge) sold within the compas of one Week about One Hundred and Twenty fat Beasts, most of them good handsom large Oxen.

Thirdly, They pay no Tithes, and their Taxes are inconsiderable; the Place is free for all Persuasions, in a Sober and Civil way; for the Church of England and the Quakers bear equal Share in the Government. They live Friendly and Well together; there is no Persecution for Religion, nor ever like to be; 'tis this that knocks all Commerce on the Head, together with high Imposts, strict Laws, and cramping Orders. Before I end this Paragraph, I shall add another Reason why Womens Wages are so exhorbitant; they are not yet very numerous, which makes them stand upon high Terms for their several Services, in Sempstering, Washing, Spinning, Knitting, Sewing, and in all the other parts of their Imployments; for they have for Spinning either Worsted or Linen, Two Shillings a Pound, and commonly for Knitting a very Course pair of Yarn Stockings, they have half a Crown a pair; moreover they are usually Marry'd before they are Twenty Years of Age, and when once in that Noose, are for the most part a little uneasie, and make their Husbands so too, till they procure them a Maid Servant to bear the burden of the Work, as also in some measure to wait on them too.

B. *High Wages in New England, 1775* [1]

After one hundred and fifty years of colonization the same complaint of scarcity of labor and high wages was still heard as at the beginning. High wages have

[1] *American Husbandry.* By an American (London, 1775), I, 73.

always been characteristic of the United States for the reason that the laborer has — at least until the last generation — had an economic alternative: he had the choice of working for wages or of farming practically free land on his own account. Hence wages had to be at least as high as the return an independent farmer could gain for himself from his land, which on the new lands of the colonial period was considerable.

I have more than once mentioned the high price of labour: this article depends on the circumstance I have now named; where families are so far from being burdensome, men marry very young, and where land is in such plenty, men very soon become farmers, however low they set out in life. Where this is the case, it must at once be evident that the price of labour must be very dear; nothing but a high price will induce men to labour at all, and at the same time it presently puts a conclusion to it by so soon enabling them to take a piece of waste land. By day labourers, which are not common in the colonies, one shilling will do as much in England as half a crown in New England. This makes it necessary to depend principally on [indented] servants, and on labourers who article themselves to serve three, five, or seven years, which is always the case with newcomers who are in poverty.

II. Indented Servants

A. *Servants and Slaves in America, 1748* [1]

At least two factors which an employer of labor must count upon are sufficiency and permanency. But there were not enough free hired laborers in the colonies to do the work, nor could an employer count upon retaining these laborers for any definite length of time. Hence some form of compulsory labor was eagerly resorted to, and both indented servants and slaves were made use of. The terms of the former ran for a short period and the control of the master was not so absolute, but the purchase of a slave involved the outlay of a considerable sum of money. Free laborers were more common in New England, indented servants in the middle colonies and Maryland, and slaves in the South. Kalm gives a careful account of these three classes of labor.

The servants which are made use of in the English American colonies are either free persons, or slaves, and the former are again of two different sorts.

First, Those who are quite free serve by the year; they are not only allowed to leave their service at the expiration of their year, but may leave it at any time when they do not agree with their masters. However, in that case they are in danger of losing their

[1] *Travels into North America.* By Peter Kalm (London, 1770). In Pinkerton, Voyages and Travels, XIII, 499-502.

wages, which are very considerable. A man-servant who has some abilities, gets between sixteen and twenty pounds in Pennsylvania currency, but those in the country do not get so much. A servant-maid gets eight or ten pounds a year: these servants have their food besides their wages, but must buy their own clothes, and what they get of these, they must thank their master's goodness for.

Second, The second kind of free servants consist of such persons as annually come from Germany, England, and other countries, in order to settle here. These new comers are very numerous every year: there are old and young ones, and of both sexes; some of them have fled from oppression, under which they supposed themselves to have laboured. Others have been driven from their country by persecution on account of religion; but most of them are poor, and have not money enough to pay their passage, which is between six and eight pounds sterling for each person; therefore they agree with the captain that they will suffer themselves to be sold for a few years, on their arrival. In that case the person who buys them, pays the freight for them; but frequently very old people come over, who cannot pay their passage, they therefore sell their children, so that they serve both for themselves and for their parents: there are likewise some who pay part of their passage, and they are sold only for a short time. From these circumstances, it appears, that the price of the poor foreigners who come over to North America is not equal, and that some of them serve longer than others: when their time is expired, they get a new suit of clothes from their master, and some other things: he is likewise obliged to feed and clothe them during the years of their servitude. Many of the Germans who come hither, bring money enough with them to pay their passage, but rather suffer themselves to be sold, with a view, that during their servitude they may get some knowledge of the language and quality of the country, and the like, that they may the better be able to consider what they shall do when they have got their liberty. Such servants are taken preferable to all others, because they are not so dear; for to buy a negroe or black slave requires too much money at once; and men or maids who get yearly wages, are likewise too dear; but this kind of servants may be got for half the money, and even for less; for they commonly pay fourteen pounds, Pensylvania currency, for a person who is to serve four years, and so on in proportion. Their wages therefore are not above three pounds Pensylvania currency, per annum. This kind of servants, the English call servings. When a person has bought such a servant

for a certain number of years, and has an intention to sell him again, he is at liberty to do so; but he is obliged, at the expiration of the term of servitude, to provide the usual suit of cloaths for the servant, unless he has made that part of the bargain with the purchaser. The English and Irish commonly sell themselves for four years, but the Germans frequently agree with the captain before they set out, to pay him a certain sum of money, for a certain number of persons; as soon as they arrive in America, they go about and try to get a man who will pay the passage for them: in return they give according to the circumstances, one or several of their children, to serve a certain number of years: at last they make their bargain with the highest bidder.

Third, The negroes or blacks make the third kind. They are in a manner slaves; for when a negro is once bought, he is the purchaser's servant as long as he lives, unless he gives him to another, or makes him free. However, it is not in the power of the master to kill his negro for a fault, but he must leave it to the magistrates to proceed according to the laws. Formerly the negroes were brought over from Africa, and bought by almost every one who could afford it. The quakers alone scrupled to have slaves; but they are no longer so nice, and they have as many negroes as other people. However, many people cannot conquer the idea of its being contrary to the laws of Christianity to keep slaves. There are likewise several free negroes in town, who have been lucky enough to get a very zealous quaker for their master, who gave them their liberty, after they had faithfully served him for some time. . . .

At present they seldom bring over any negroes to the English colonies, for those which were formerly brought thither, have multiplied considerably. . . .

The negroes were formerly brought from Africa, as I mentioned before; but now this seldom happens, for they are bought in the West Indies, or American Islands, whither they were originally brought from their own country: for it has been found that on transporting the negroes from Africa, immediately into these northern countries, they have not such a good state of health, as when they gradually change places, and are first carried from Africa to the West Indies, and from thence to North America. It has frequently been found, that the negroes cannot stand the cold here so well as the Europeans or whites; for whilst the latter are not in the least affected by the cold, the toes and fingers of the former are frequently frozen. There is likewise a material difference among them in this point;

for those who come immediately from Africa, cannot bear the cold so well as those who are either born in this country, or have been here for a considerable time; for the frost easily hurts the hands and feet of the negroes which come from Africa, or occasions violent pains in their whole body, or in some parts of it, though it does not at all affect those who have been here for some time. . . .

The price of negroes differs according to their age, health, and abilities. A full-grown negro costs from forty pounds and upwards to a hundred, of Pensylvania currency. A negro boy or girl of two or three years old, can hardly be got for less than eight or fourteen pounds in Pensylvania currency. Not only the quakers, but likewise several christians of other denominations, sometimes set their negroes at liberty.

B. *Work of a Servant in Virginia, 1656* [1]

The work of an indented servant was carefully regulated by the terms of the contract or indenture that was entered into between the servant and the master who paid his passage money. The following advice to intending emigrants who expected to use this method of reaching America shows the usual terms of such a contract.

Let such as are so minded not rashly throw themselves upon the voyage, but observe the nature, and enquire the qualities of the persons with whom they ingage to transport themselves, or if (as not acquainted with such as inhabit there, but go with Merchants and Mariners, who transport them to others,) let their covenant be such, that after their arrival they have a fort-nights time assigned them to enquire of their Master, and make choyce of such as they intend to expire their time with, nor let that brand of selling of servants, be any discouragement to deter any from going, for if a time must be served, it is all one with whom it be served, provided they be people of honest repute, with which the Country is well replenished.

And be sure to have your contract in writing and under hand and seal, for if ye go over upon promise made to do this or that, or to be free or your own men, it signifies nothing, for by a law of the Country (waiving all promises) any one coming in and not paying their own passages, must serve if men or women four years, if younger according to their years, but where an Indenture is, that is binding and observing.

The usual allowance for servants is (besides their charge of passage

[1] *Leah and Rachel: or, the Two Fruitfull Sisters Virginia and Mary-land.* By John Hammond (London, 1656). In Force, Tracts and Other Papers (Washington, 1844), III, no. xiv, 11, 14.

defrayed) at their expiration, a years provision of corne, dubble apparrell, tooles necessary, and land according to the custome of the Country, which is an old delusion, for there is no land accustomary due to the servant, but to the Master, and therefore that servant is unwise that will not dash out that custom in his covenant, and make that due of land absolutely his own, which although at the present, not of so great consequence; yet in a few years will be of much worth, as I shall hereafter make manifest. . . .

Those Servants that will be industrious may in their time of service gain a competent estate before their Freedomes, which is usually done by many, and they gaine esteeme and assistance that appear so industrious: There is no Master almost but will allow his Servant a parcell of clear ground to plant some Tobacco in for himself, which he may husband at those many idle times he hath allowed him and not prejudice, but rejoyce his Master to see it, which in time of Shipping he may lay out for commodities, and in Summer sell them again with advantage, and get a Sow-pig or two, which any body almost will give him, and his Master suffer him to keep them with his own, which will be no charge to his Master, and with one years increase of them may purchase a Cow Calf or two, and by that time he is for himself; he may have Cattle, Hogs and Tobacco of his own, and come to live gallantly; but this must be gained (as I said) by Industry and affability, not by sloth nor churlish behaviour.

C. *Servants in Pennsylvania, 1775* [1]

The largest number of indented servants in any of the colonies was to be found in Pennsylvania, where slavery was opposed by the Quakers. While the term of service seems long as compared with the cost to the master, it was probably in many cases the only system by which the settlers could reach America.

Pensylvania is not without negroe slaves for cultivation, though the number bears no proportion to the white servants; it may also be proper to remark, that there are in this province, and it is the same in others, a difference in the white servants; they have, throughout the province, the same sort of servants that perform work in England, that is, hired by the year, in which case, they are washed, lodged, and boarded, but find their own cloaths; an able bodied man in husbandry, will get from 10l. to 16l. a year sterling. Maids will get so high as 5l. to 7l. Another sort of white servants, which are unknown in Britain, are the new settlers that are poor. Very many of

[1] *American Husbandry*. By an American (London, 1775), I, 169–70.

these cannot even pay their passage from Europe, which amounts to 10l. sterling, and agree therefore with the captain of the ship, that he shall sell them for a certain number of years to be servants, in which case the farmers buy them, that is, pay their freight, &c. and this usually puts something also in the captain's pocket, beyond what he would otherwise have. If the passenger has some money, but not enough, he is then sold for a shorter time to make up the sum. There are laws in the province to regulate this kind of servitude, which seems very strange to us; the master is bound to feed, clothe, and use the servant as well as others. Others that have money enough to pay for their passage, especially Germans, yet will not pay, but choose to be sold in order to have time to gain a knowledge of the language and the manner of living in the country. Both these sorts of servants are greatly preferred to the common hiring methods; for the wages do not amount to much more than half the other, and at the same time there is a security of keeping them, which with common servants is not the case; nor are these near so industrious. These distinctions in servitude are met with in our other colonies, but they do not occur so often, because for one new comer in them, there are twenty at Philadelphia.

III. Slave Labor

A. *The Slave Trade to Virginia, 1708*[1]

Slaves were first introduced into America in very large numbers from the West Indies, where they were "seasoned" before being brought to the colder climate of the more northerly regions. After the monopoly of the Royal African Company was broken the larger part of the trade passed into the hands of other traders, among whom were not a few New Englanders. Colonel Jenings was President of the Council of Virginia.

Virginia November y^{e} 27th 1708

May it please yo^{r} Lordsps,

It was the 11th of last moneth and the Fleet then sailed, before I had the honor to receive yo^{r} Lordships of the 15th of April concerning the Negro Trade Since which I have endeavoured by the means of the proper officers, and the informations of the ancient Inhabitants, to answer Yo^{r} Lordps Commands, and in Order thereto have herewith sent yo^{r} Lordships an account of all the Negros imported into this Colony from the 24th of June 1699 to the 12th of October last past

[1] *Letter from E. Jenings to the Lords of Trade.* In Colonial Records of North Carolina, I, 693–4.

distinguishing those imported by the Royal African Company (679), and those by separate Traders (5928), wherein yo^r Lordships will perceive the latter have had much the greater Share. As to the particular Rates at which those Negros have been sold, they have been variable according to the different times of their coming in and the quality & ages of the Slaves, but the medium for men & women may be reckoned from 20 to 30 pounds a head for those sold by the Company & from 20 to 35£ a head for the like kinds sold by the separate Traders, who in gen^l have sold theirs at a higher rate than the Company.

How the Country was supplyed with Negros before the Trade to Africa was laid open in the year 1698. I have endeavoured to Inform my Self from some ancient Inhabitants conversant in that Trade as well as by recollecting what hath happened in my own knowledge, & find that before the year 1680 what negros were brought to Virginia were imported generally from Barbados for it was very rare to have a Negro ship come to this Country directly from Africa since that time, and before the year 1698. the Trade of Negros became more frequent, tho not in any proportion to what it hath been of late, during which the African Company sent several Ships and others by their Licence (as I have been informed) having bought their Slaves of the Company brought them in hither for Sale, Among which I remember the late Alderman Jeffrys & S^r Jeffry Jeffrys were principally concerned, but all this time the price of the Negroes was currant from £18 to 25 per head for men and women & never exceeded that Rate. Whether the opening the Trade to Africa having created an Emulation between the Company and the Seperate Traders which should outbid the other in the purchase of their Slaves there, or whether the dexterity of their Factors there in taking advantage of the prevailing humour of our Inhabitants for some years past of buying Negros even beyond their abilities, or the Concurrence of both, hath raised the Rates of Negros so extravagantly, I shall not pretend to determine but this I may venture to say that it will be much harder to lower the price again now tis raised unless there be the same Freedom of Trade continued as formerly for tho the Inhabitants of this Country in gen^ll will not be so fond of purchasing Negros as of late being sensibly convinced of their Error which has in a manner ruined the Credit of the Country yet there will still be some that must, & others that will at any rate Venture to buy them, & if the Company alone have the management of the Trade, they'l find pretences enough to keep up the price if not to impose what higher

rate they please, which the buyer must submit to, knowing he cannot be supplyed by any other hand. As for vessells trading directly from this place to the Coast of Africa I never knew of any nor is the same practicable this Country not being provided with Commoditys suitable for carrying on such a Trade. This is the best account I am able to give in Answer to yo[r] Lordships Commands, wherein if I have failed or mistaken in any point I beg yo[r] Lordships favourable Construction thereof Since I can with truth assure your Lordships that no man hath a greater desire to serve yo[r] Lordships than

My Lords
Your Lordships
most obedient servant
E. Jenings

B. *Request of a Missionary for Slaves, 1716* [1]

Perhaps no more striking illustration could be given of the toleration with which slavery was regarded in the southern colonies, and of the great scarcity of hired labor, than this request of a minister of the gospel for three or four slaves. John Urmstone labored for many years as a missionary in the straggling settlements of the Carolinas and was described by a neighbor as a devout man.

North Carolina, Dec[r] 15[th], 1716

Sir.

. . . . I pray you therefore desire the Treasurer to the Society to pay to Joseph Jekyll Esq[r] His Majesty's Collector of Customs at Boston in New England, or his order 20 pounds sterling (bills of equal date being produced) and if his correspondent the Bearer hereof will undertake it pay likewise 40 pounds of like money to be invested in goods to buy me 3 or 4 Negroes in Guinea; but if he refuse I beg some body may be employed to engage some Guinea Capt[n] or Merchant to be delivered to the aforesaid Jo[n] . . . Jekyll or to me 3 Negroes men of middle stature about 20 years old and a Girl of about 16 years. here is no living without servants there are none to be hired of any colour and none of the black kind to be sold good for anything under 50 or 60£ white servants are seldom worth keeping and never stay out the time indented for. I likewise desire a Bill of Exchange for £20 sterling payable to me or order at Barbadoes. I believe I have more due for according to my account: on the 25[th] Instant there will be an hundred pounds coming to me. I shall be glad to

[1] *The Colonial Records of North Carolina.* Edited by W. L. Saunders (Raleigh, 1886), II, 260–1.

hear my requests are complied with and till then must struggle with a hard Winter, scarcity of Provisions, and rub through many more difficulties with all the patience I am endued with and ever be, Sir,

Your most humble Servt

Jon. Urmstone
Missionary

C. *Objections to the Prohibition of Rum and Slaves in Georgia, 1738* [1]

Georgia was founded in 1733 under the leadership of General J. E. Oglethorpe as an asylum for "all the useless Poor in England, and distressed Protestants in Europe." A charter was granted containing various restrictions and conditions and the control of the colony was placed in the hands of a board of trustees. Among the clauses governing the colony were two which prohibited the importation of rum and of slaves. These soon became a bone of contention between the colonists and the trustees. A petition was drawn up by the settlers and sent to the trustees in London, asking that these restrictions be removed.

The First of *February*, 1732–3, Mr. *Oglethorpe* arrived at *Georgia* with the first Embarkation, consisting of *Forty* Families, making upwards of *One Hundred* Persons, all brought over and supported at the Publick Charge. The First Thing he did after he arrived in *Georgia*, was to *make* a kind of *solemn Treaty* with a Parcel of *fugitive Indians*, . . . and all of them have been ever since maintain'd at the Publick Charge, at vast Expence, when many poor *Christians* were starving in the Colony for Want of Bread; . . .

SECONDLY, He *prohibited the Importation of Rum*, under Pretence, that it was destructive to the Constitution, and an Incentive to Debauchery and Idleness: However specious these Pretences might seem, a little Experience soon convinced us, that this Restriction was directly opposite to the Well-being of the Colony: . . .

THE THIRD Thing he did, was regularly to *set out* to each Freeholder in Savannah, Lots of *Fifty* Acres, in *three* distinct Divisions, *viz.* The *Eighth Part* of *One* Acre for a House and Garden in the Town: *Four* Acres and *seven-eighths*, at a small Distance from Town; and *Forty five* Acres at a considerable Remove from thence. No regard was had to the *Quality* of the Ground in the Divisions, so that some were altogether Pine Barren, and some Swamp and Morass, far surpassing the Strength and Ability of the *Planter:* . . . But these

[1] *A True and Historical Narrative of the Colony of Georgia, in America.* By Pat. Tailfer *et al.* (Charles Town, 1741). In Force, Tracts and Other Papers (Washington, 1835), I, no. iv, 20–3.

and many other Hardships were scarcely felt by the few People that came there, so long as Mr. *Oglethorpe* staid, which was about *Fifteen* Months: They work'd hard indeed, in Building some Houses in Town; but then they labour'd in common, and were likewise assisted by Negroes from *Carolina*, who did the heaviest Work: But at[1] Mr. *Oglethorpe's* going to *England*, the growing fame of the Colony was thereby greatly increased, so that as it has been before observ'd, People, in Abundance, from all Parts of the World, flock'd to *Georgia*. Then they began to consider and endeavour, every one according to his Genius or Abilities, how they might best subsist themselves. Some, with great Labour and Expence, essayed the *Making of Tar:*[2] This, as 'tis well known to the Trustees, never quitted Costs: Others tried to *make planck* and *saw Boards;* which, by the great Price they were obliged to sell them at, by Reason of the great Expence of white Servants, was the chief Means of ruining those who thought to procure a Living by their Buildings in Town; for Boards of all kinds, could always be bought in *Carolina*, for half the Price that they were able to sell them at; but few were capable to Commission them from thence, and those who were so, were prevented from doing it, upon Pretence of discouraging the Labour of white People in *Georgia*. Those who had Numbers of Servants and Tracts of Land in the County, went upon the *Planting of Corn*, *Pease*, *Potatoes*, *&c.* and the Charge of these who succeeded the best, so far exceeded the Value of the Produce, that it would have saved *three fourths* to have bought all from the *Carolina* Market. The *Falling of Timber* was a Task very unequal to the Strength and Constitution of white Servants; and the *Hoeing the Ground*, they being exposed to the sultry Heat of the Sun, insupportable; and it is well known, that this Labour is one of the hardest upon the Negroes, even tho' their Constitutions are much stronger than white People, and the Heat no Way disagreeable nor hurtful to them; but in us it created *inflamatory Fevers* of various kinds, both *continued* and *intermittent; wasting* and *tormenting Fluxes*, most *excruciating Cholicks*, and *Dry-Belly-Achs; Tremors*, *Vertigoes*, *Palsies*, and a long Train of *painful* and *lingring nervous Distempers;* which brought on to many a Cessation both from Work and Life; especially

[1] Before he departed, a Vessel with about *twenty* Families of *Jews* arrived all of whom had Lots assigned them; and likewise a Vessel with *forty* transported *Irish* Convicts, whom he purchased, altho' they had been before refused at *Jamaica*, and who afterwards occasioned continual Disturbances in the Colony.

[2] Mr. *Causton*, the Trustees Store keeper, mostly at their Charge, made a Tarr Kiln, which turned out to no Advantage.

as *Water* without any Qualification was the chief Drink, and *Salt Meat* the only Provisions that could be had or afforded; And so general were these Disorders, that during the hot Season, which lasts from *March* to *October*, hardly one Half of the Servants and working People, were ever able to do their Masters or themselves the least Service; and the Yearly Sickness of each Servant, generally speaking, cost his Master as much as would have maintained a Negro for *four* Years. These Things were represented to the Trustees in the Summer of 1735, in a Petition for the Use of Negroes, signed by about *Seventeen* of the better Sort of People in *Savannah;* In this Petition there was also set forth the great *Disproportion* betwixt the Maintenance and Cloathing of white Servants and Negroes. This Petition was carried to *England* and presented to the Trustees, by Mr. *Hugh Stirling*, an experienced Planter in the Colony; but no Regard was had to it, or to what he could say, and great Resentment was even shewn to Mr. *Thompson*, the Master of the Vessel in which it went.

D. *Answer of the Trustees, 1739*[1]

The trustees refused to accede to the petition of some of the landholders of Georgia to permit the introduction of rum and slaves and to alter the tenure of the lands. Some years later, however, the influence of the Carolinas proved irresistible and both these restrictions were broken down.

To the Magistrates of the Town of Savannah, *in the Province of* Georgia.

The Trustees for establishing the Colony of *Georgia* in *America*, have received by the Hands of Mr. *Benjamin Ball* of *London*, Merchant, an attested Copy of a Representation, signed by You the Magistrates, and many of the Inhabitants of *Savannah*, on the *9th* of *December* last, for altering the Tenure of the Lands, and introducing Negroes into the Province, transmitted from thence by Mr. *Robert Williams*.

The Trustees are not surprized to find unwary People drawn in by crafty Men, to join in a Design of *extorting by Clamour* from the Trustees an Alteration in the Fundamental Laws, framed for the Preservation of the People, from those very Designs. . . .

And the Trustees are the more confirmed in their opinion of the Unreasonableness of this Demand, that they have received Petitions from the *Darien*, and other Parts of the Province, representing the Inconvenience and Danger, which must arise to the good People of

[1] *A True and Historical Narrative of the Colony of Georgia, in America.* By Pat. Tailfer *et al.* (Charles Town, 1741). In Force, Tracts and Other Papers (Washington, 1835), I, no. iv, 51–3.

the Province from the Introduction of Negroes. And as the Trustees themselves are fully convinced, that besides the Hazard attending that *Introduction*, it would destroy all Industry among the white Inhabitants; and that by giving them a Power to alien their Lands, the Colony would soon be too like its Neighbours, void of white Inhabitants, filled with Blacks, and reduced to be the precarious Property of a Few, equally exposed to Domestick Treachery, and Foreign Invasion; and therefore the Trustees cannot be supposed to be in any Disposition of granting this Request; and if they have not before this signified their Dislike of it, this Delay is to be imputed to no other Motives, but the Hopes they had conceived, that Time and Experience would bring the Complainants to a better Mind: And the Trustees readily join Issue with them in their Appeal to Posterity, who shall judge between them, who were their best Friends; *Those*, who endeavoured to preserve for them a Property in their Lands, by tying up the Hands of their unthrifty Progenitors; or *They*, who wanted a Power to mortgage or alien them: Who were the best Friends to the Colony, *Those* who with great Labour and Cost had endeavoured to form a Colony of His Majesty's Subjects, and persecuted *Protestants* from other Parts of *Europe*, had placed them on a fruitful Soil, and strove to secure them in their Possessions, by those Arts which naturally tend to keep the Colony full of useful and industrious People, capable both to cultivate and defend it; or *Those*, who, to gratify the greedy and ambitious Views of a few Negroe Merchants, would put it into their Power to become sole Owners of the Province, by introducing their baneful Commodity; which, it is well known by sad Experience, has brought our Neighbour Colonies to the Brink of Ruin, by driving out their white Inhabitants, who were their Glory and Strength, to make room for Black, who are now become the Terror of their unadvised Masters.

Signed by Order of the Trustees,
this 20th Day of June, 1739.
Benj. Martyn, *Secretary.*

E. *Unprofitableness of Slavery, 1774*[1]

By 1774 the tobacco lands of Virginia had been pretty well exhausted as a result of wasteful methods of cultivation, and the combination of slavery and worn-out lands was clearly unprofitable. This conclusion was reached by the tutor in the family of a rich Virginia planter.

[1] *Journal and Letters, 1767–1774.* By Philip V. Fithian. Edited by J. R. Williams (Princeton, 1900). Also in American Historical Review, V, 304, 307.

Mr. *Carter* now possesses 60000 Acres of Land; and about 600 Negroes. But his Estate is much divided, and lies in almost every county in this Colony; He has Lands in the Neighbourhood of Williamsburg, and an elegant and Spacious House in that City. He owns a great part of the well-known Iron-Works near Baltimore in Maryland. And he has one or more considerable Farms not far from Anapolis. . . .

Monday, April 4. After Supper I had a long conversation with Mrs. Carter concerning Negroes in Virginia, and find that She esteems their value at no higher rate than I do. We both concluded, (I am pretty certain that the conclusion is just) that if in Mr. Carters, or in any Gentlemans Estate, all the Negroes should be sold, and the money put to Interest in safe hands, and let the Lands which these Negroes now work lie wholly uncultivated, the bare Interest of the Price of the Negroes would be a much greater yearly income than what is now received from their working the Lands, making no allowance at all for the trouble and Risk of the Masters as to the Crops and Negroes. How much greater then must be the value of an estate here if these poor enslaved Africans were all in their native desired Country, and in their Room industrious Tenants, who being born in freedom, by a laudable care, would not only inrich their Landlords, but would raise a hardy Offspring to be the strength and the honour of the Colony.

EXCHANGE

I. Commodity Money

A. *Commodity Money in North Carolina, 1749* [1]

Throughout the whole of the colonial period there were continuous complaints as to the scarcity of money. The reasons for this were obvious: the colonists were for the most part poor people who did not bring much money with them; and what they did bring was speedily sent back to England in exchange for more needed supplies and manufactured commodities. As the colonies were thus drained of metallic money resort must be had to substitutes therefor to carry on domestic exchange, and various commodities were made to do service as money, often being given the legal tender quality. Such a list as that authorized in North Carolina was fairly typical of all the early colonies.

The Province of North Carolina was first settled by People from Virginia in low circumstances who moved hither for the benefit of

[1] *Letter of Governor Johnston to the Board of Trade* (1749), in Colonial Records of North Carolina. Edited by W. L. Saunders (Raleigh, 1886), IV, 920–1.

a larger and better range for their Stocks, from such a small Beginning it was a great many years before it appeared there was any Increase of Inhabitants sufficient to form a Government the whole number of Taxables in Thirty years time not amounting to one thousand, . . .

The poverty of the first inhabitants made (for want of a better currency) to Enact in their Assemblies that all Payments whatsoever, might be made in sundry Commodities or Products of the Province a List whereof here follows, agreeable to the Law as it past upon the Revise, Anno: 1715.

	£	s.	d.
Indian Corn per bushel	..	1	8
Tallow per Pound	..	..	5
Beaver & Otter Skins per Pound	..	2	6
Butter per Pound	..	..	6
Raw buck & Doe Skins per Pound	..	..	9
Feathers per Pound	..	1	4
Pitch per Barrel full gauged	1	..	..
Pork per Barrel	2	5	..
Tobacco per 100 cwt	..	10	..
Wheat per Bushel	..	3	6
Leather Tann'd uncurried per pound	..	..	8
Wild Cat Skins per piece	..	1	..
Cheese per Pound	..	..	4
Drest Buck & Doe Skins per Pound	..	2	6
Tar per Barrel full gauged	..	10	..
Whale Oil per Barrel	1	10	..
Beef per Barrel	1	10	..

This method has been continued down to this time with very little Alteration to the great Damage of the Revenue it being a stated rule, that of so many Commodities the worst sort were only paid. Altho' many attempts have been made to remedy the Inconvenience attending such a currency it has always proved fruitless (the People being generally fond of a Law which gave them such Advantages).

B. *Tobacco Notes in Virginia, 1781* [1]

In addition to commodities, various forms of representative money were used by the colonists to make up for the scarcity of coin. Paper money based upon tobacco, upon land, upon a coin reserve, upon general commodities, and upon the credit of the government were tried in different colonies, but no one of them stood the test of time better than the tobacco notes of Virginia. These were first introduced in 1730 and were the subject of considerable legislation thereafter. They were still in general use in 1781, at which date they are described by Chastellux, a French officer who served in the Revolution and traveled quite extensively.

[1] *Travels in North-America, in the Years 1780, 1781, and 1782.* By the Marquis (François Jean) de Chastellux (London, 1787), 131–3.

We were just going out to take a walk, when we received a visit from Mr. *Victor*, whom I had seen at Williamsburgh; . . . [we] put ourselves under the guidance of Mr. Victor, who first took us to the warehouses or magazines of tobacco. These warehouses, of which there are numbers in Virginia, though, unfortunately, great part of them has been burned by the English, are under the direction of public authority. There are inspectors nominated to prove the quality of the tobacco brought by the planters, and if found good, they give a receipt for the quantity. The tobacco may then be considered as sold, these authentic receipts circulating as ready money in the country. For example: suppose I have deposited twenty hogsheads of tobacco at Petersburg, I may go fifty leagues thence to Alexandria or Fredericksburg, and buy horses, cloths, or any other article with these receipts, which circulate through a number of hands before they reach the merchant who purchases the tobacco for exportation. This is an excellent institution, for by this means tobacco becomes not only a sort of bank-stock, but current coin. You often hear the inhabitants say, "This watch cost me ten hogsheads of tobacco; this horse fifteen hogsheads; or, I have been offered twenty, &c." It is true that the price of this article, which seldom varies in peace, is subject to fluctuations in time of war; but then, he who receives it in payment, makes a free bargain, calculates the risks and expectations, and runs the hazard; in short we may look on this as a very useful establishment; it gives to commodities value and circulation, as soon as they are manufactured, and, in some measure, renders the planter independent of the merchant.

II. Credit Money

A. *A Defence of Paper Money by a Colonial Governor, 1724*[1]

In 1690 Massachusetts, in order to pay the expenses of an expedition against Canada, issued what was probably the first emission of government paper money in the British Empire, certainly the first in America. The notes were to be redeemed out of the revenues from taxation, and were limited to a small amount. They proved to be a great convenience and served their purpose so well that a second issue was made in 1709. This example was followed in time by all the colonies except North Carolina. Many bad results followed — over-issue, depreciation, postponement of redemption, and in some cases repudiation. The British government early took a determined stand against these issues and instructed the colonial governors to veto all bills authorizing such issues. But the need of money in the colonies was

[1] *Documents relating to the Colonial History of New York.* Edited by E. B. O'Callaghan (Albany, 1855), V, 735–8, *passim.*

so great that in spite of its defects paper money was justified by leading men like Franklin and defended by colonial governors like Burnet and Pownall. Burnet, the author of this letter, was governor of New York.

New York 21st Nov 1724

My Lords.

. . . . But this being an Act for making Paper Money, tho' within my additional Instruction which allows of such Acts when they are for raising or levying a publick Revenue.

I think myself obliged to offer to your Lordships Reasons that are in my poor opinion sufficient to justify it and other Acts of this Nature with the same precaution.

I am very sensible of the disadvantage I lye under in writing upon this argument, and the misfortune it is to any cause to have already appeared in an odious light, as I am but too well convinced is the case of paper money Acts in the Plantations, by your Lordships last words in your letter of the 17th of june — *That Bills for encreasing of Paper money will meet with no encouragement* — I hope your Lordships will not think it presumption in me even after this declaration to endeavor to give you a more favourable opinion of such Acts and if I go too far in this, it is owing to the encouragement your Lordships have given me by receiving what I have offered on all occasions in so kind a manner and admitting the best constructions that my weak Reasoning will bear.

I have already in my letter of the 12th of May last used several Arguments to justify the Paper Act in New Jersey, and therein I observed how well the Bills of New York keep up their credit and the reasons why they have not fall'n in value as those of Carolina and New England and that under a good regulation these Acts are both of Service to the Trade of the Plantations and of great Britain, for which that I may not repeat I beg leave to refer to my said letter of the 12th of May last and desire your Lordships would again take into your consideration when you are to determine your opinion on this present Act. . . .

I take the liberty further to observe to your Lordships on how many occasions the Government of Great Britain has found it impracticable to raise all the money wanted within the year from whence all the present debts of the nation have arisen: The same necessity lyes often upon the Plantations where frequenty a sum of ready money is wanted, which it would be an intollerable Tax to raise at once, and therefore they are forced to imitate the Parliament at home, in anticipating upon remote funds. And as there is no Bank nor

East India company nor even private subscribers capable of lending the Province the money they want at least without demanding the extravagant Interest of 8 P^r^ Cent which is the common Interest here, but would ruin the Publick to pay since this is a Case [where] there is no possible way left to make distant funds provide ready money, when it is necessarily wanted, but making paper Bills to be sunk by such funds. Without this Carolina would have been ruined by their Indian War Boston could not now support theirs nor could any of the Provinces have furnished such considerable Sums to the Expeditions against Canada. Nor could at present any of the necessary repairs of this Fort be provided for, nor the arrears of the Revenue be discharged, which is done by this Act in a Tax to be levied in 4 years nor indeed any publick Service readily and sufficiently effected.

And I may add one thing more that this manner of compulsive credit does in fact keep up its value here and that it occasions much more Trade and business than would be without it and that more Specie is exported to England by reason of these Paper Bills than could be if there was no circulation but of Specie for which reason all the merchants here seem now well satisfied with it.

I hope your Lordships will excuse my being so long and earnest upon this head because it is a subject of the greatest importance to all the Plantations and what I humbly conceive has often been misrepresented by the Merchants in London. . . .

Your Ldp's mo. obt & mo. humble St.

Sg^d^ W. BURNET.

B. *The Land Bank and the Extension of the Bubble Act to the Colonies, 1741* [1]

In order to provide the people with a medium of exchange the colonial government of Massachusetts had for some years issued treasury notes which were to be redeemed out of taxes, and which circulated freely as money. But in 1739 the governor was instructed not to issue any more and to redeem those outstanding. Fearful of the effects of such a sudden contraction of the currency a scheme was brought forward by a group of citizens for a Land Bank, which should issue notes upon the security of land or commodities. This was opposed by the merchants of Boston, who organized in opposition a Silver Bank, which issued notes upon a deposit of silver. The opponents of the Land Bank, among whom Hutchinson was a leader, also invoked the authority of Parliament to put an end to it. In 1720 Parliament had passed the Bubble Act (6 Geo. I, ch. 18), directed against specula-

[1] *The History of Massachusetts, from the First Settlement thereof in 1628, until the Year 1750.* By Thomas Hutchinson (3d edition, Boston, 1795), II, 352–5.

tive companies, and they now declared that this act "did, does, and shall extend to the colonies in America." This act was retroactive and hence especially arbitrary. John Adams gave it as his opinion that this measure was more important than the Stamp Act in arousing opposition in Massachusetts to the English government.

A general dread of drawing in all the paper money without a substitution of any other instrument of trade in the place of it, disposed a great part of the Province to favour what was called the land bank or manufactory scheme, which was began or rather revived in this year 1739, and produced such great and lasting mischiefs, that a particular relation of the rise, progress and overthrow of it may be of use to discourage and prevent any attempts of the like nature in future ages. By a strange conduct in the general court, they had been issuing bills of credit for eight or ten years annually for charges of government, and being willing to ease each present year, they had put off the redemption of the bills as far as they could; but the governor being restrained by his instruction from going beyond the year 1741, that year was unreasonably loaded with thirty or forty thousand pounds sterling taxes, which, according to the general opinion of the people, it was impossible to levy, not only on account of the large sum, but because all the bills in the Province were but just sufficient to pay it, and there was very little silver or gold, which by an act of government was allowed to be paid for taxes as equivalent to the bills. A scheme was laid before the general court by the author of this history, then one of the representatives of Boston, in which it was proposed to borrow in England upon interest, and to import into the Province, a sum in silver equal to all the bills then extant, and therewith to redeem them from possessors, and furnish a currency for the inhabitants, and to repay the silver at distant periods, which would render the burden of taxes tolerable by an equal division on a number of future years, and would prevent the distress of trade by the loss of the only instrument, the bills of credit, without another provided in its place. But this proposal was rejected. . . . Royal instructions were no bar to the proceedings of private persons. The project of a bank in the year 1714 was revived. The projector of that bank now put himself at the head of seven or eight hundred persons, some few of rank and good estate, but generally of low condition among the plebians, and of small estate, and many of them perhaps insolvent. This notable company were to give credit to 150,000l. lawful money, to be issued in bills, each person being to mortgage a real estate in proportion

to the sums he subscribed and took out, or to give bond with two sureties, but personal security was not to be taken for more than 100l. from any one person. Ten directors and a treasurer were to be chosen by the company. Every subscriber or partner was to pay three per cent. interest for the sum taken out, and five per cent. of the principal; and he that did not pay bills might pay the produce and manufacture of the Province at such rates as the directors from time to time should set, and they should commonly pass in lawful money. The pretence was that, by thus furnishing a medium and instrument of trade, not only the inhabitants in general would be better able to procure the Province bills of credit for their taxes, but trade, foreign and inland, would revive and flourish. The fate of the project was thought to depend upon the opinion which the general court should form of it. It was necessary therefore to have a house of representatives well disposed. Besides the eight hundred persons subscribers, the needy part of the Province in general favoured the scheme. One of their votes will go as far in popular elections as one of the most opulent. The former are most numerous, and it appeared that by far the majority of the representatives for 1740 were subscribers to or favourers of the scheme, and they have ever since been distinguished by the name of the land bank house.

Men of estates and the principal merchants in the Province abhorred the project and refused to receive the bills, but great numbers of shop-keepers, who had lived for a long time before upon the fraud of a depreciating currency, and many small traders, gave credit to the bills. The directors, it was said, by a vote of the company, became traders, and issued just what bills they thought proper without any fund or security for their ever being redeemed. They purchased every sort of commodity, ever so much a drug, for the sake of pushing off their bills, and by one means or other a large sum, perhaps fifty or sixty thousand pounds, was abroad. To lessen the temptation to receive the bills, a company of merchants agreed to issue their notes, or bills redeemable by silver and gold at distant periods, much like the scheme in 1733, and attended with no better effect. The governor exerted himself to blast this fraudulent undertaking, the land bank. Not only such civil and military officers as were directors or partners, but all who received or paid any of the bills, were displaced. The governor negatived the person chosen speaker of the house, being a director of the bank, and afterwards negatived thirteen of the new-elected counsellors who were directors or partners in or reputed favourers of the scheme. But all was insufficient

to suppress it. Perhaps the major part, in number, of the inhabitants of the Province, openly or secretly were well-wishers to it. One of the directors afterwards acknowledged to me, that although he entered into the company with a view to the public interest, yet when he found what power and influence they had in all public concerns, he was convinced it was more than belonged to them, more than they could make a good use of, and therefore unwarrantable. Many of the most sensible discreet persons in the Province saw a general confusion at hand. The authority of parliament to control all public and private persons and proceedings in the colonies was, in that day, questioned by nobody. Application was therefore made to parliament for an act to suppress the company, which, notwithstanding the opposition made by their agent, was very easily obtained, and therein it was declared that the act of the 6th of king George I. chapter the eighteenth, did, does and shall extend to the colonies and plantations in America. It was said the act of George I. when it passed, had no relation to America, but another act twenty years after gave it a force even from the passing it, which it never could have had without. This was said to be an instance of the transcendent power of parliament. Although the company was dissolved, yet the act of parliament gave the possessors of the bills a right of action against every partner or director for the sums expressed with interest. The company were in a maze. At a general meeting some, it was said, were for running all hazards, although the act subjected them to a præmunire, but the directors had more prudence, and advised them to declare that they considered themselves dissolved, and met only to consult upon some method of redeeming their bills from the possessors, which every man engaged to endeavour in proportion to his interest, and to pay in to the directors or some of them to burn or destroy. Had the company issued their bills at the value expressed in the face of them, they would have had no reason to complain of being obliged to redeem them at the same rate; but as this was not the case in general, and many of the possessors of the bills had acquired them for half their value, as expressed, equity could not be done, and so far as respected the company, perhaps, the parliament was not very anxious, the loss they sustained being but a just penalty for their unwarrantable undertaking if it had been properly applied. Had not the parliament interposed, the Province would have been in the utmost confusion, and the authority of government entirely in the land bank company.

C. *The Necessity of Paper Money in the Colonies, 1764*[1]

The stoppage of the trade with the Spanish West Indies by the enforcement of the navigation acts cut off from the British colonies in America their chief source of silver, while they were drained of their existing supply by an adverse balance of trade with England. This was urged by many as an argument for the emission of paper money by the colonies, and is so used by ex-Governor Pownall in the extract here given.

The British American Colonies have not, within themselves, the means of making money or coin. They cannot acquire it from Great Britain; the balance of trade being against them. The returns of those branches of commerce, in which they are permitted to trade to any other part of Europe, are but barely sufficient to pay this balance. — By the present act of navigation, they are prohibited from trading with the Colonies of any other nations: so that there remains nothing but a small branch of African trade, and the scrambling profits of an undescribed traffic, to supply them with silver. However, matters have been so managed, that the general currency of the Colonies, used to be in *Spanish* and *Portugese* coin. This supplied the internal circulation of their home business, and always finally came to England, in payments for what the Colonists exported from hence. If the act of navigation should be carried into such rigorous execution, as to cut off this supply of a silver currency to the Colonies; the thoughts of administration should be turned to the devising some means, of supplying the Colonies with money of some sort or other: . . .

. . . The remedy lies in a certain address in carrying in execution the act of navigation — but if that remedy is neglected; the next recourse must lie in some means of maintaining a currency specially appropriated to the Colonies; and must be partly, such as will keep a certain quantity of silver coin in circulation there — and partly, such as shall establish *a paper currency*, holding a value nearly equal to silver. . . .

In Colonies, the essence of whose nature requires a progressive increase of settlements and trade, and yet who from the balance of trade with the mother country, being against them, must suffer a constantly decreasing quantity of silver money; *a certain quantity of paper-money*, is necessary. It is necessary, to keep up the increasing operations of this trade, and the settlements: it is also necessary, in such circumstances, to the equal distribution and general applica-

[1] *Administration of the British Colonies.* By Thomas Pownall (5th edition, London, 1774), I, 180–1, 186, 194.

tion of these benefits to the whole Colony: which benefits would otherwise become a monopoly to the *monied merchant only:* it is prudent, and of good policy in the mother coun ry to permit it, as it is the surest means of drawing the balance of the Colony trade and culture, to its own profit.

VIII. Retail Trade

Market at Philadelphia, 1748 [1]

Markets and fairs were still of general use in the middle of the eighteenth century in bringing buyers and sellers together. The market at Philadelphia was probably the most important of its kind in America, and served a very useful purpose.

But it is much to be feared that the trade of Philadelphia, and of all the English colonies, will rather decrease than increase, in case no provision is made to prevent it. I shall hereafter plainly shew upon what foundation this decrease of trade is likely to take place.

The town not only furnishes most of the inhabitants of Pensylvania with the goods which they want, but numbers of the inhabitants of New Jersey come every day and carry on a great trade.

The town has two great fairs every year; one in May, and the other in November, both on the sixteenth days of those two months. But besides these fairs, there are every week two market days, viz. Wednesday and Saturday. On those days the country people of Pensylvania and New Jersey bring to town a quantity of victuals, and other productions of the country, and this is a great advantage to the town. It is therefore to be wished that the like regulation might be made in our Swedish towns. You are sure to meet with every produce of the season, which the country affords, on the market-days. But on other days they are in vain sought for.

Provisions are always to be got fresh here, and for that reason most of the inhabitants never buy more at a time than what will be sufficient till the next market-day. In summer there is a market almost every day; for the victuals do not keep well in the great heat. There are two places in the town where these markets are kept; but that near the court-house is the principal. It begins about four or five o'clock in the morning, and ends about nine o'clock in the forenoon.

The town is not enclosed, and has no other custom-house than the great one for the ships. . . .

[1] *Travels into North America.* By Peter Kalm (London, 1771). In Pinkerton, Voyages and Travels, XIII, 394–5.

The country people come to market in New York twice a week, much in the same manner as they do at Philadelphia; with this difference, that the markets are here kept in several places.

POPULATION

I. Growth of the Population

A. *The Increase of Mankind, 1755*[1]

The rapid increase of the population in a new country like the American colonies, where land was plentiful and marriages early, was the subject of comment by more than one observer. No one has stated the case more scientifically than Franklin.

6. Land being thus plenty in *America*, and so cheap as that a labouring Man, that understands Husbandry, can in a short Time save Money enough to purchase a Piece of new Land sufficient for a Plantation, whereon he may subsist a Family; such are not afraid to marry; for if they even look far enough forward to consider how their Children when grown up are to be provided for, they see that more Land is to be had at Rates equally easy, all Circumstances considered.

7. Hence Marriages in *America* are more general, and more generally early, than in *Europe*. And if it is reckoned there, that there is but one Marriage *per annum* among 100 Persons, perhaps we may here reckon two; and if in *Europe* they have but four Births to a Marriage (many of their Marriages being late) we may here reckon eight, of which if one half grow up, and our Marriages are made, reckoning one with another at twenty Years of Age, our People must at least be doubled every twenty Years.

8. But notwithstanding this Increase, so vast is the Territory of *North-America*, that it will require many Ages to settle it fully; and till it is fully settled, Labour will never be cheap here, where no Man continues long a Labourer for others, but gets a Plantation of his own, no Man continues long a Journeyman to a Trade, but goes among those new Settlers, and sets up for himself, &c. Hence Labour is no cheaper now, in *Pensylvania*, than it was thirty Years ago, tho' so many Thousand labouring People have been imported. . . .

21. The Importation of Foreigners into a Country that has as many Inhabitants as the present Employments and Provisions for Subsistence will bear, will be in the End no Increase of People, unless

[1] *Observations Concerning the Increase of Mankind and the Peopling of Countries.* By Benjamin Franklin (Boston, 1755), 44–5, 51–4. Also in Works (Sparks edition, Boston, 1840), II, 312–4.

the New-comers have more Industry and Frugality than the Natives, and then they will provide more Subsistence and increase in the Country; but they will gradually eat the Natives out. — Nor is it necessary to bring in Foreigners to fill up any occasional Vacancy in a Country; for such Vacancy (if the Laws are good, § 14, 16) will soon be filled by natural Generation. Who can now find the Vacancy made in *Sweden*, *France*, or other warlike Nations, by the Plague of Heroism 40 Years ago; in *France*, by the Expulsion of the Protestants; in *England*, by the Settlement of her Colonies; or in *Guinea*, by 100 Years Exportation of Slaves that has blackened half *America?* — The Thinness of Inhabitants in *Spain*, is owing to national Pride and Idleness, and other Causes, rather than to the Expulsion of the *Moors*, or to the making of new Settlements.

22. There is in short no Bound to the prolific Nature of Plants or Animals, but what is made by their crowding and interfering with each other's Means of Subsistence. Was the Face of the Earth vacant of other Plants, it might be gradually sowed and overspread with one Kind only; as for Instance, with Fennel; and were it empty of other Inhabitants, it might in a few Ages be replenished from one Nation only; as for Instance, with *Englishmen*. Thus there are supposed to be now upwards of one Million *English* Souls in *North-America*, (tho' 'tis thought scarce 80,000 have been brought over Sea) and yet perhaps there is not one the fewer in *Britain*, but rather many more, on Account of the Employment the Colonies afford to Manufacturers at Home. This Million doubling, suppose but once in 25 Years, will in another Century be more than the People of *England*, and the greatest number of *Englishmen* will be on this Side the Water. What an Accession of Power to the *British* Empire by Sea as well as Land! What Increase of Trade and Navigation! What Numbers of Ships and Seamen! We have been here but little more than 100 Years, and yet the Force of our Privateers in the late War, united, was greater, both in Men and Guns, than that of the whole *British* Navy in Queen *Elizabeth's* Time. — How important an Affair then to *Britain* is the present Treaty for settling the Bounds between her Colonies and the *French*, and how careful should she be to secure Room enough, since on the Room depends so much the Increase of her People? . . .

24. Which leads me to add one Remark: That the Number of purely white People in the World is proportionably very small. All *Africa* is black or tawny. *Asia* chiefly tawny. *America* (exclusive of the new Comers) wholly so. And in *Europe*, the *Spaniards*,

Italians, and *French*, are generally of what we call a swarthy Complexion; the more northern Nations with the *English*, making the principal body of White People on the Face of the Earth. I could wish their Numbers were increased. And while we are, as I may call it, *Scouring* our Planet, by clearing *America* of Woods, and so making this Side of our Globe reflect a brighter Light to the Eyes of Inhabitants in *Mars* or *Venus*, why should we in the Sight of Superior Beings, darken its People? Why increase the sons of *Africa*, by Planting them in *America*, where we have so fair an Opportunity, by excluding all Blacks and Tawnys, of increasing the lovely White and Red? But perhaps I am partial to the Complexion of my Country, for such Kind of Partiality is natural to Mankind.

B. *Population of the British American Colonies, 1752–1755* [1]

The following estimate of the population of the colonies in the middle of the 18th century was made up from the reports of the governors to the Lords of Trade.

An Account of the Number of White Inhabitants in His Majesty's Colonies in North America distinguishing the Number of the Militia or of Men capable of bearing Arms; taken from the last Returns transmitted to the Lords Commissioners for Trade & Plantations, and, where those Returns are defective, from the best accounts which can be obtained.

Colonies	Dates of the returns	Total Number of Whites	Militia	Men Capable of bearing arms
Georgia	1752	3,000	.....	.....
South Carolina	1752	25,000	5,000	.....
North Carolina	1755	50,000	.....	13,000
Virginia	1755	125,000	28,000	.....
Maryland	1749	100,000	12,500	.....
Pennsylvania	No returns since the Year	* 220,000	.....	25,000
Connecticut	1730; but according to	100,000	.....	.....
Rhode Island	the best Accounts	30,000	.....	.....
New Jersey	1755	75,000	10,000	.....
New York	No returns since the Year	55,000	.....	12,000
Massachusetts Bay	1738; but according to	200,000	.....	40,000
	the best Accounts			
New Hampshire	1755	75,000	6,000	.....
Nova Scotia	1754	4,000	1,200	.....
	Total.....	1,062,000		

* Of these 100,000 are German and other foreign Protestants.

[1] *Documents relative to the Colonial History of New York.* Edited by E. B. O'Callaghan (Albany, 1855), VI, 993.

C. *Large Families in America, 1748* [1]

More than one traveler in the colonies noticed the large families and the rapid growth of the population under the favoring conditions of a new country. The population doubled about once in twenty-three years, which is an extremely rapid rate of growth. Kalm, ever a scientific observer, collected the following interesting data on this point.

It does not seem difficult to find out the reasons why the people multiply more here than in Europe. As soon as a person is old enough, he may marry in these provinces, without any fear of poverty; for there is such a tract of good ground yet uncultivated, that a new-married man can, without difficulty, get a spot of ground, where he may sufficiently subsist with his wife and children. The taxes are very low, and he need not be under any concern on their account. The liberties he enjoys are so great that he considers himself as a prince in his possessions. I shall here demonstrate, by some plain examples, what effect such a constitution is capable of.

Maons Keen, one of the Swedes in Raccoon, was now near seventy years old: he had many children, grandchildren, and great-grandchildren; so that, of those who were yet alive, he could muster up forty-five persons. Besides them, several of his children and grandchildren died young, and some in a mature age. He was, therefore uncommonly blessed. Yet his happiness is not comparable to that which is to be seen in the following examples, and which I have extracted from the Philadelphia gazette.

In the year 1732, died at Ipswich, in New England, Mrs. Sarah Tuthil, a widow, aged eighty-six years. She had brought sixteen children into the world; and from seven of them only she had seen one hundred and seventy-seven grand-children and great-grandchildren.

In 1739, May 30th, the children, grand, and great-grand-children of Mr. Richard Buttington, in the parish of Chester, in Pensylvania, were assembled in his house; and they made together one hundred and fifteen persons. The parent of these children, Richard Buttington, who was born in England, was then entering into his eighty-fifth year; and was at that time quite active, fresh, and sensible. His eldest son, then sixty years old, was the first Englishman born in Pensylvania.

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[1] *Travels into North America.* By Peter Kalm (London, 1770). In Pinkerton, Voyages and Travels, XIII, 504–5.

In 1742, 8th of Jan., died at Trenton, in New Jersey, Mrs. Sarah Furman, a widow, aged ninety-seven years. She was born in New England, and left five children, sixty-one grand-children, one hundred and eighty-two great-grand-children, and twelve great-great-grand-children, who were all alive when she died.

In 1739, 28th of Jan., died at South Kingston, in New England, Mrs. Maria Hazard, a widow, in the hundredth year of her age. She was born in Rhode Island, and was the grandmother of the then vice-governor of that island, Mr. George Hazard. She could count altogether five hundred children, grand-children, great-grand-children, and great-great-grand-children. When she died two hundred and five persons of them were alive; a grand-daughter of hers had already been grandmother near fifteen years.

In this manner, the usual wish of blessing in our liturgy,[1] that the new-married couple may see their grandchildren, till the third and fourth generation, has been literally fulfilled in regard to some of these persons.

II. Condition of the People

A. *A Prosperous People, 1775*[2]

The anonymous author of *American Husbandry* gives a more favorable account of the inhabitants than he does of the agriculture of the colonies. His account is evidently based upon association with the more well-to-do members of the population, but probably does not overstate the prosperity of the community as a whole.

There is in many respects a great resemblance between New England and Great Britain. In the best cultivated parts of it, you would not in travelling through the country, know, from its appearance, that you were from home. The face of the country has in general a cultivated, inclosed, and chearful prospect; the farm-houses are well and substantially built, and stand thick; gentlemen's houses appear every where, and have an air of a wealthy and contented people. Poor, strolling and ragged beggars are scarcely ever to be seen; all the inhabitants of the country appear to be well fed, cloathed, and lodged, nor is any where a greater degree of independency, and liberty to be met with: nor is that distinction of the ranks and classes to be found which we see in Britain, but which is infinitely more apparent in France and other arbitrary countries. . . .

[1] Mr. Kalm speaks here of the Swedish liturgy.

[2] *American Husbandry*. By an American (London, 1775), I, 61-2, 70-1, 184-5, 187-8.

Respecting the lower classes in New England, there is scarcely any part of the world in which they are better off. The price of labour is very high, and they have with this advantage another no less valuable, of being able to take up a tract of land whenever they are able to settle it. In Britain a servant or labourer may be master of thirty or forty pounds without having it in their power to lay it out in one useful or advantageous purpose; it must be a much larger sum to enable them to hire a farm, but in New England there is no such thing as a man procuring such a sum of money by his industry without his taking a farm and settling upon it. The daily instances of this give an emulation to all the lower classes and make them point their endeavours with peculiar industry to gain an end which they all esteem so particularly flattering.

This great ease of gaining a farm, renders the lower class of people very industrious; which, with the high price of labour, banishes everything that has the least appearance of begging, or that wandering, destitute state of poverty, which we see so common in England. A traveller might pass half through the colony without finding, from the appearance of the people, that there was such a thing as a want of money among them. . . .

This country [Pennsylvania] is peopled by as happy and free a set of men as any in America. Out of trade there is not much wealth to be found, but at the same time there is very little poverty, and hardly such a thing as a beggar in the province. This is not only a consequence of the plenty of land and the rate of labour, but also of the principles of the Quakers, who have a considerable share in the government of the country. It is much to the honour of this sect that they support their own poor in all countries, in a manner much more respectable than known in any other religion. . . .

Their meals are three times a day, and served quite in the English taste: coffee, tea, and chocolate, are of the best sorts, cheap enough to be commanded in plenty by every planter, especially coffee and chocolate; sugar also is cheaper than in England; these, with good bread and good butter, give a breakfast superior to what gentlemen of small estates usually make in England. For dinner and supper they are much better supplied, as may easily be supposed, when the plenty is considered that abounds in an American plantation: game, variety of fish, venison almost every where, poultry in prodigious plenty and variety, meat of all kinds, very good, and killed on every plantation of any size; several sorts of fruits, in a plenty surpassing any thing known in the best climates of Europe, such as melons,

water-melons, and cucumbers, in the open field; apples, pears, cherries, peaches, nectarines, goose-berries, currants, strawberries, and rasberries, gathering some every month from May till October. Their grapes, though plentiful to excess, are inferior. These are circumstances that make it neither difficult nor expensive to keep an excellent table. The wine commonly drank is Madeira, at not more than half the price of England; freight is cheaper, and there is none, or a very trifling duty. French and Spanish wines are also drank; rum is very cheap; and good beer is brewed by those who are attentive to the operation.

From hence it is sufficiently clear, that the time passed at the table need not be a barren entertainment.

B. *The People of New York, 1759* [1]

The inhabitants of New York were more sociable than the New Englanders, and as prosperous as those of any of the colonies. Burnaby was an English clergyman, who traveled extensively throughout the colonies, and wrote entertainingly of his impressions.

The inhabitants of New York, in their character, very much resemble the Pensylvanians: more than half of them are Dutch, and almost all traders: they are, therefore, habitually frugal, industrious, and parsimonious. Being however of different nations, different languages, and different religions, it is almost impossible to give them any precise or determinate character. The women are handsome and agreeable; though rather more reserved than the Philadelphian ladies. Their amusements are much the same as in Pensylvania; viz. balls, and sleighing expeditions in the winter; and, in the summer, going in parties upon the water, and fishing; or making excursions into the country. . . .

The present state of this province is flourishing: it has an extensive trade to many parts of the world, particularly to the West Indies; and has acquired great riches by the commerce which it has carried on, under flags of truce, to Cape-François and Monte-Christo. The troops, by having made it the place of their general rendezvous, have also enriched it very much. However, it is burthened with taxes, and the present public debt amounts to more than 300,000l. currency. The taxes are laid upon estates real and personal; and there are

[1] *Travels through the Middle Settlements of North-America, in the Years 1759 and 1760.* By Andrew Burnaby (London, 1775), 66–7.

duties upon Negroes, and other importations. The provincial troops are about 2600 men. The difference of exchange between currency and bills, is from 70 to 80 per cent.

C. *An Adverse View of Virginians, 1759*[1]

An unfriendly characterization of the inhabitants of Virginia is given by Burnaby.

From what has been said of this colony [Virginia], it will not be difficult to form an idea of the character of its inhabitants. The climate and external appearance of the country conspire to make them indolent, easy, and good-natured; extremely fond of society, and much given to convivial pleasures. In consequence of this, they seldom show any spirit of enterprise, or expose themselves willingly to fatigue. Their authority over their slaves renders them vain and imperious, and entire strangers to that elegance of sentiment, which is so peculiarly characteristic of refined and polished nations. Their ignorance of mankind and of learning, exposes them to many errors and prejudices, especially in regard to Indians and negroes, whom they scarcely consider as of the human species; so that it is almost impossible, in cases of violence, or even murder, committed upon those unhappy people by any of the planters, to have the delinquents brought to justice; for either the grand-jury refuse to find the bill, or the petit jury bring in their verdict, not guilty.

The display of a character thus constituted, will naturally be in acts of extravagance, ostentation, and a disregard of economy; it is not extraordinary, therefore, that the Virginians out-run their incomes; and that having involved themselves in difficulties, they are frequently tempted to raise money by bills of exchange, which they know will be returned protested, with ten per cent. interest.

The public or political character of the Virginians corresponds with their private one: they are haughty and jealous of their liberties, impatient of restraint, and can scarcely bear the thought of being controuled by any superior power. Many of them consider the colonies as independent states, not connected with Great Britain, otherwise than by having the same common King, and being bound to her by natural affection. There are but few of them that have a turn for business, and even those are by no means expert at it. I

[1] *Travels through the Middle Settlements in North-America, in the Years 1759 and 1760.* By Andrew Burnaby (London, 1775). In Pinkerton, Voyages and Travels, XIII, 714–6.

have known them, upon a very urgent occasion, vote the relief of a garrison, without once considering whether the thing was practicable, when it was most evidently and demonstrably otherwise. In matters of commerce they are ignorant of the necessary principles that must prevail between a colony and the mother country; they think it a hardship not to have an unlimited trade to every part of the world. They consider the duties upon their staples as injurious only to themselves; and it is utterly impossible to persuade them that they affect the consumer also. However, to do them justice, the same spirit of generosity prevails here which does in their private character; they never refuse any necessary supplies for the support of government when called upon, and are a generous and loyal people. . . .

The Carolinians live in much the same easy and luxurious manner as the Virginians. The planters are remarkably hospitable towards strangers; and persons who fall into distress through bad success or misfortune scarce ever fail of being relieved by their liberality: so that beggary is almost unknown in these parts of the world.

There are supposed to be 300,000 souls in North Carolina, amongst whom are great numbers of Negroes and other slaves. The taxables in 1773 were computed to amount to 64,000: the number of Negroes and Mulattoes about 10,000.

CHAPTER IV

ENGLISH COLONIAL THEORY AND POLICY, 1651–1763

I. The Mercantile System

A Modern Interpretation, 1882[1]

The most scholarly and philosophical view of the body of economic practices and doctrines of the sixteenth, seventeenth, and eighteenth centuries, known as Mercantilism, is that of Professor Schmoller, in the essay here quoted. Professor Schmoller is professor of economic history in the University of Berlin.

Yet this very time, — the second half of the sixteenth century and the seventeenth century, — was an epoch which gave every inducement for an economic transformation. The way was already clear, out of the narrow circle of the small territory into the larger union of forces possible only in the great state. An immeasurable horizon had been opened to the world's trade in India and America; the possession of spice colonies, and of the new gold and silver countries, promised measureless riches to those states that understood how to seize their share of the booty. But it was clear that for such purposes it was necessary to have powerful fleets, and either great trading companies or equivalent state organisations. At home, also, economic changes, of no less importance, took place. The new postal services created an altogether new system of communication. Bills of exchange, and the large exchange operations at certain fairs, together with the banks which were now making their appearance, produced an enormous and far-reaching machinery of credit. The rise of the press gave birth to a new kind of public opinion, and to a crowd of newspapers which coöperated with the postal service in transforming the means of communication. Moreover, there now took place in several countries a geographical division of labour, which broke up the old many-sidedness of town industry; here the woollen manufacture was group-

[1] *The Mercantile System and its Historical Significance.* By Gustav Schmoller. In Economic Classics. Edited by W. J. Ashley (New York, 1896), 46–69, *passim.* Printed by permission of the publishers, The Macmillan Company.

ing itself in certain neighborhoods and around certain towns, there the linen manufacture; here the tanning trade, there the hardware trade. The old handicraft (*Handwerk*) began to convert itself into a domestic industry (*Hausindustrie*);[1] the old staple trade, carried on in person by the travelling merchants, began to assume its modern shape with agents, commission dealers, and speculation.

These forces all converging impelled society to some large economic reorganisation on a broader basis, and pointed to the creation of national states with a corresponding policy. . . . What, to each in its time, gave riches and superiority first to Milan, Venice, Florence, and Genoa; then, later, to Spain and Portugal; and now to Holland, France, and England, and, to some extent, to Denmark and Sweden, was a *state* policy in economic matters, as superior to the territorial as that had been to the municipal. . . . States arose, forming united, and therefore strong and wealthy, economic bodies, quite different from earlier conditions; in these, quite unlike earlier times, the state organisation assisted the national economy and this the state policy; and, quite unlike earlier times too, public finance served as the bond of union between political and economic life. . . . Herein economic and political interests went hand in hand. . . . The whole internal history of the seventeenth and eighteenth centuries, not only in Germany, but everywhere else, is summed up in the opposition of the economic policy of the state to that of the town, the district, and the several Estates; the whole foreign history is summed up in the opposition to one another of the separate interests of the newly rising states, each of which sought to obtain and retain its place in the circle of European nations, and in that foreign trade which now included America and India. Questions of political power were at issue which were, at the same time, questions of economic organisation. What was at stake was the creation of real *political* economies as unified organisms, the center of which should be, not merely a state policy reaching out in all directions, but rather the living heartbeat of a united sentiment.

Only he who thus conceives of mercantilism will understand it; in its innermost kernel it is nothing but state making — not state

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[1] *Hausindustrie* and *Domestic System*, are terms which came to be employed in Germany and England to designate the industrial conditions destroyed or threatened by the *Factory System*, to which they presented the contrast that the work was done in the workman's home. But they are now used by economic historians as more or less technical terms to describe a stage in industrial development marked by other and even more important traits.

making in a narrow sense, but state making and national-economy making at the same time; state making in the modern sense, which creates out of the political community an economic community, and so gives it a heightened meaning. The essence of the system lies not in some doctrine of money or of the balance of trade; not in tariff barriers, protective duties, or navigation laws; but in something far greater:—namely, in the total transformation of society and its organisation, as well as of the state and its institutions, in the replacing of a local and territorial economic policy by that of the national state....

If we pause for a while to consider this foreign and external economic policy of the European states of the seventeenth and eighteenth centuries — which it has hitherto been the custom to regard as the essential feature of the mercantile system,—it is not, of course, our purpose to describe the details of its several forms. The general features of its regulations are well enough known. Difficulties were put in the way of the importation of manufactured goods; and their production and exportation were favoured by the prohibition of the export of raw materials, by bounties on export, and by commercial treaties. Encouragement was given to domestic shipping, to the fisheries, and to the coasting trade by restricting or forbidding foreign competition. Commerce with the colonies and the supplying of them with European wares, was reserved for the mother country. The importation of colonial produce had to take place directly from the colony itself, and not by way of European ports; and everywhere an attempt was made to establish *direct* trading relations by great privileged trading companies and by state aid in manifold ways. England promoted the export of corn and the prosperity of agriculture at the same time by the payment of bounties; France hindered the export of corn for the benefit of industry; Holland, in its later days, sought to create very large stores of corn and a very free trade in corn so as both to insure a due domestic supply and to encourage trade. But, as we have already said, an account of these several measures would go beyond the purpose of this essay. The general features are known; the details have even yet not been subjected to due scientific investigation. Our only purpose here is to grasp the fundamental ideas of the system; which, naturally, found varying expression, here in high duties, there in low. Here in the prevention, there in the encouragement of the corn trade. The thought pursued everywhere was this: as competition with other countries fluctuated up and down, to cast the weight of the power of the state into the scales of the balance in the way demanded in each case by national interests.

II. The English Colonial Policy

A. *The Navigation Act of 1660*[1]

The Dutch, who were the foremost commercial nation of Europe during the seventeenth century, had obtained virtual control of the colonial trade, and in order to gain this trade for themselves the English government passed a series of measures, known as the navigation acts, which were designed to restrict the carrying trade between England and her colonies to British ships. These acts had important effects upon Dutch, English, and colonial shipping. The act of 1660 repeated, and somewhat extended, in more careful language, the provisions of the act of 1651. Only the most essential parts of the latter act are here given.

An Act for the Encourageing and increasing of Shipping and Navigation [1660]

[I] For the increase of Shiping and incouragement of the Navigation of this Nation, wherein under the good providence and protection of God the Wealth Safety and Strength of this Kingdome is soe much concerned Bee it Enacted by the Kings most Excellent Majesty and by the Lords and Commons in this present Parliament assembled and the Authoritie thereof That from and after the First day of December One thousand six hundred and sixty and from thence forward noe Goods or Commodities whatsoever shall be Imported into or Exported out of any Lands Islelands Plantations or Territories to his Majesty belonging or in his possession or which may hereafter belong unto or be in the possession of His Majesty His Heires and Successors in Asia Africa or America in any other Ship or Ships Vessell or Vessells whatsoever but in such Ships or Vessells as doe truely and without fraude belong onely to the people of England or Ireland Dominion of Wales or Towne of Berwicke upon Tweede, or are of the built of, and belonging to any of the said Lands Islands Plantations or Territories as the Proprietors and right Owners therof and wherof the Master and three fourthes of the Marriners at least are English under the penalty of the Forfeiture and Losse of all the Goods and Commodityes which shall be Imported into, or Exported out of, any the aforesaid places in any other Ship or Vessell, as alsoe of the Ship or Vessell with all its Guns Furniture Tackle Ammunition and Apparell, ...

[1] *Statutes of the Realm*, V, 246–250; and in Select Charters and other Documents illustrative of American History, 1606–1775, edited by W. Macdonald (New York, 1910), 110–115, *passim*. Printed by permission of the editor and the publishers, The Macmillan Company.

[III.] And it is further Enacted . . . that noe Goods or Commodityes whatsoever of the growth production or manufacture of Africa Asia or America or of any part thereof, or which are described or laid downe in the usuall Maps or Cards of those places be Imported into England Ireland or Wales Islands of Guernsey or Jersey or Towne of Berwicke upon Tweede in any other Ship or Ships Vessell or Vessels whatsoever, but in such as doe truely and without fraude belong onely to the people of England or Ireland, Dominion of Wales or Towne of Berwicke upon Tweede or of the Lands Islands Plantations or Territories in Asia Africa or America to his Majesty belonging as the proprietors and right owners thereof, and whereof the Master and three fourthes at least of the Mariners are English under the penalty of the forfeiture of all such Goods and Commodityes, and of the Ship or Vessell in which they were Imported with all her Guns Tackle Furniture Ammunition and Apparell, . . .

[IV.] And it is further Enacted. . . that noe Goods or Commodityes that are of forraigne growth production or manufacture and which are to be brought into England Ireland Wales, the Islands of Guernsey & Jersey or Towne of Berwicke upon Tweede in English built shiping, or other shiping belonging to some of the aforesaid places, and navigated by English Mariners as above-said shall be shiped or brought from any other place or Places, Country or Countries but onely from those of their said Growth Production or Manufacture, or from those Ports where the said Goods and Commodityes can onely or are or usually have beene first shiped for transportation and from none other Places or Countryes under the penalty of the forfeiture of all such of the aforesaid Goods as shall be Imported from any other place or Country contrary to the true intent and meaning hereof, as alsoe of the ship in which they were imported with all her Guns Furniture Ammunition Tackle and Apparel, ...

[XVIII.] And it is further Enacted . . . That from and after . . . [April 1, 1661] . . . noe Sugars Tobaccho Cotton Wool Indicoes Ginger Fustick or other dyeing wood of the Growth Production or Manufacture of any English Plantations in America Asia or Africa shall be shiped carryed conveyed or transported from any of the said English Plantations to any Land Island Territory Dominion Port or place whatsoever other then to such [other] English Plantations as doe belong to His Majesty His Heires and Successors or to the Kingdome of England or Ireland or Principallity of Wales or Towne of Berwicke upon Tweede there to be laid on shore under the penalty

of the Forfeiture of the said Goods or the full value thereof, as alsoe of the Ship with all her Guns Tackle Apparel Ammunition and Furniture, . . .

B. *The Navigation Act of 1663*[1]

While the earlier acts had sought to give to British vessels a monopoly of the carrying trade between England and her colonies, that of 1663 was designed to secure to English merchants the profits of handling all goods that were sent to the colonies, as these must now be "laden and shipped" in England and from "noe other place." With the passage of this act colonial trade was brought completely under Parliamentary control, and subsequent measures aimed simply to strengthen the system by more detailed regulations.

An Act for the Encouragement of Trade [1663.]

[IV.] And in reguard His Majesties Plantations beyond the Seas are inhabited and peopled by His Subjects of this His Kingdome of England, For the maintaining a greater correspondence and kindnesse betweene them and keepeing them in a firmer dependance upon it, and rendring them yet more beneficiall and advantagious unto it in the farther Imployment and Encrease of English Shipping and Seamen, vent of English Woollen and other Manufactures and Commodities rendring the Navigation to and from the same more safe and cheape, and makeing this Kingdome a Staple not onely of the Commodities of those Plantations but alsoe of the Commodities of other Countryes and Places for the supplying of them, and it being the usage of other Nations to keepe their Plantations Trade to themselves, Be it enacted and it is hereby enacted That from and after the Five and twentyeth day of March One thousand six hundred sixtie fower noe Commoditie of the Growth Production or Manufacture of Europe shall be imported into any Land Island Plantation Colony Territory or Place to His Majestie belonging, or which shall hereafter belong unto, or be in the Possession of His Majestie His Heires and Successors in Asia Africa or America (Tangier onely excepted) but what shall be bona fide and without fraude laden and shipped in England Wales or the Towne of Berwicke upon Tweede and in English built Shipping, . . . and whereof the Master and three Fourthes of the Marriners at least are English, and which shall be carryed directly thence to the said Lands Islands Plantations Colonyes Territories

[1] *Statutes of the Realm*, V, 449–452; also in Select Charters and other Documents illustrative of American History, 1606–1775, edited by W. Macdonald (New York, 1910), 133–135. Printed by permission of the editor and the publishers, The Macmillan Company.

or Places, and from noe other place or places whatsoever Any Law Statute or Usage to the contrary notwithstanding, under the Penaltie of the losse of all such Commodities of the Growth Production or Manufacture of Europe as shall be imported into any of them from any other Place whatsoever by Land or Water, . . .

[V.] PROVIDED alwayes . . . That it shall and may be lawfull to shipp and lade in such Shipps, and soe navigated as in the foregoeing Clause is sett downe and expressed in any part of Europe Salt for the Fisheries of New England and New found land, and to shipp and lade in the Medera's Wines of the Growth thereof, and to shipp and lade in the Westerne Islands or Azores Wines of the Growth of the said Islands, and to shipp and take in Servants or Horses in Scotland or Ireland, and to shipp or lade in Scotland all sorts of Victuall of the Growth or Production of Scotland, and to shipp or lade in Ireland all sortes of Victuall of the Growth or Production of Ireland, and the same to transport into any of the said Lands Islands Plantations Colonyes Territories or Places, Any thing in the foregoing Clause in the contrary in any wise notwithstanding.

C. *The English Colonial System: a Favorable View, 1688*[1]

Sir Josiah Child was the chairman, and virtually the ruler, of the East India Company for some years, and was therefore greatly interested in the extension of the commercial power of England and favored the navigation acts. He argues, however, in the extract here quoted that "Profit and power ought joyntly to be considered," and that the encouragement of her shipping would make England a powerful and wealthy country. This was good mercantilistic doctrine. Child's book was first published in 1688, and was issued in a much enlarged form in the second edition.

CHAP. IV.

CONCERNING THE ACT OF NAVIGATION

Though this *Act* be by most concluded a very beneficial Act for this *Kingdom*, especially by the *Masters* and *Owners* of *Shiping*, and by all *Sea-men;* yet some there are, both wise and honest *Gentlemen* and *Merchants*, that doubt whether the Inconveniencies it hath brought with it, be not greater than the Conveniencies.

For my own part, I am of opinion that in relation to *Trade*, *Shipping*, *Profit* and *Power*, it is one of the choicest and most prudent *Acts* that ever was made in *England*, and without which we had not now been *Owners* of one half the *Shipping*, nor Trade, nor employed one

[1] *A New Discourse of Trade.* By Sir Josiah Child (2d edition, London, 1694), 112–114.

half of the *Sea-men* which we do at present; but seing time hath discovered some *Inconveniencies* in it, if not *Defects*, which in my poor opinion do admit of an easie Amendment, and seing that the whole *Act* is not approved by unanimous consent, I thought fit to Discourse a little concerning it, wherein after my plain method I shall lay down such Objections as I have met with, and subjoyn my Answers, with such Reasons as occur to my memory in confirmation of my own Opinion.

The *Objections* against the whole *Act* are such as these;

Object. 1. Some have told me, That I on all occasions magnifie the *Dutch policy* in relation to their Trade, and the *Dutch* have no *Act of Navigation*, and therefore they are certainly not always in the right, as to the understanding of their true Interest in Trade, or else we are in the wrong in this. I answer, I am yet to be informed where the *Dutch* have missed their proper Interest in Trade, but that which is fit for one Nation to do in relation to their Trade, is not fit for all, no more than the same Policy is necessary to a prevailing Army that are Masters of the Field, to an Army of less force, then to be able to encounter their Enemy at all times and places: The *Dutch by reason of their great Stocks, low Interest, multitude of Merchants and Shipping, are Masters of the Field in Trade, and therefore have no need to build Castles, Fortresses and places of Retreat;* such I account Laws of limitation, and securing of Particular Trades to the *Natives* of any Kingdom; because they, viz. the *Dutch* may be well assured, *That no Nation can enter in common with them in any Trade, to gain Bread by it, while their own use of Money is at* 3 per cent, *and others at* 6 per cent *and upwards*, &c. Whereas if we should suffer their Shiping in common with ours in those Trades, which are secured to the *English* by *Act of Navigation*, they must necessarily in a few Years, for the reasons above said, eat us quite out of them.

Object. 2. The second Objection to the whole Act is; Some will confess that as to *Merchants* and *Owners* of *Ships the Act of Navigation is eminently beneficial*, but say, that *Merchants* and *Owners* are but an inconsiderable number of men in respect of the whole *Nation*, and that Interest of the greater number, that our *Native Commodities* and *Manufactures* should be taken from us at the best rates, and Foreign Commodities sold us at the cheapest, with admission of *Dutch Merchants* and *Shiping in common with the English*, by my own implication would effect.

My answer is, That I cannot deny but this may be true, if the present profit of the generality be barely and singly considered; . . .

but this *Kingdom* being an *Island*, the defence whereof hath alwayes been our *Shiping* and *Sea-men*, it seems to me *absolutely necessary that Profit and power ought joyntly to be considered*, and if so, I think none can deny but the *Act of Navigation* hath and doth occasion building and employing three times the number of *Ships* and *Sea-men*, that otherwise we should or would do, and that consequently, *If our Force at Sea were so greatly impared, it would expose us to the receiving of all kinds of Injuries and Affronts from our Neighbours, and in conclusion render us a despicable and miserable People.*

OBJECTIONS TO SEVERAL PARTS OF THE ACT OF NAVIGATION

OBJECT. 1. *The Inhabitants and Planters of our Plantations in* America, *say, This Act will in time ruin their Plantations, if they may not be permitted, at least to carry their Sugars to the best Markets, and not be compelled to send all to, and receive all Commodities from* England.

I answer, *If they were not kept to the Rules of the Act of Navigation, the consequence would be, that in a few years the benefit of them would be wholly lost to the Nation;* It being agreeable to the policy of the *Dutch, Danes, French, Spaniards, Portugals* and *all Nations in the World*, to keep their external *Provinces* and *Collonies* in a subjection unto, and dependency upon their Mother-Kingdom; and if they should not do so, the *Dutch* who as I have said, are Masters of the Field in Trade, would carry away the greatest of advantage by the Plantations, of all the Princes in *Christendom*, leaving us and others only the trouble of breeding men, and sending them abroad to cultivate the Ground, and have bread for their Industry. . . .

D. *The English Colonial System: an Unfavorable View, 1776* [1]

The general policy of England toward her colonies was nowhere so clearly stated by any contemporary writer as by Adam Smith. He was the intellectual father of modern individualism, and believed that the state should not interfere in matters of trade or industry, but should permit the individual to seek his own economic interests. Consequently he did not approve of the mercantile doctrines which found their expression in the economic policy of England toward her colonies.

But there are no colonies of which the progress has been more rapid than that of the English in North America.

Plenty of good land, and liberty to manage their own affairs

[1] *An Inquiry into the Nature and Causes of the Wealth of Nations.* By Adam Smith (Edinburgh, 1776). Edited by Edwin Cannan (London, 1904), 73–86, *passim.*

their own way, seem to be the two great causes of the prosperity of all new colonies.

In the plenty of good land the English colonies of North America, though, no doubt, very abundantly provided, are, however, inferior to those of the Spaniards and Portugueze, and not superior to some of those possessed by the French before the late war. But the political institutions of the English colonies have been more favourable to the improvement and cultivation of this land, than those of any of the other three nations. . . .

Fourthly, in the disposal of their surplus produce, or of what is over and above their own consumption, the English colonies have been more favoured, and have been allowed a more extensive market, than those of any other European nation. Every European nation has endeavoured more or less to monopolize to itself the commerce of its colonies, and, upon that account, has prohibited the ships of foreign nations from trading to them, and has prohibited them from importing European goods from any foreign nation. But the manner in which this monopoly has been exercised in different nations has been very different.

Some nations have given up the whole commerce of their colonies to an exclusive company, of whom the colonies were obliged to buy all such European goods as they wanted, and to whom they were obliged to sell the whole of their own surplus produce. . . .

Other nations, without establishing an exclusive company, have confined the whole commerce of their colonies to a particular port of the mother country, from whence no ship was allowed to sail, but either in a fleet and at a particular season, or, if single, in consequence of a particular licence, which in most cases was very well paid for. . . .

Other nations leave the trade of their colonies free to all their subjects, who may carry it on from all the different ports of the mother country, and who have occasion for no other licence than the common dispatches of the customhouse. . . . Under so liberal a policy the colonies are enabled both to sell their own produce and to buy the goods of Europe at a reasonable price. But since the dissolution of the Plymouth company, when our colonies were but in their infancy, this has always been the policy of England. It has generally too been that of France, and has been uniformly so since the dissolution of what, in England, is commonly called their Mississippi company. The profits of the trade, therefore, which France and England carry on with their colonies, though no doubt somewhat higher than if the competition was free to all other nations, are, however, by no

means exorbitant; and the price of European goods accordingly is not extravagantly high in the greater part of the colonies of either of those nations.

In the exportation of their own surplus produce too, it is only with regard to certain commodities that the colonies of Great Britain are confined to the market of the mother country. These commodities having been enumerated in the act of navigation and in some other subsequent acts, have upon that account been called *enumerated commodities*.[1] The rest are called *non-enumerated;* and may be exported directly to other countries, provided it is in British or Plantation ships, of which the owners and three-fourths of the mariners are British subjects.

Among the non-enumerated commodities are some of the most important productions of America and the West Indies; grain of all sorts, lumber, salt provisions, fish, sugar, and rum. . . .

The enumerated commodities are of two sorts: first, such as are either the peculiar produce of America, or as cannot be produced, or at least are not produced, in the mother country. Of this kind are, melasses, coffee, cacaonuts, tobacco, pimento, ginger, whale-fins, raw silk, cotton-wool, beaver, and other peltry of America, indigo, fustic, and other dying woods: secondly, such as are not the peculiar produce of America, but which are and may be produced in the mother country, though not in such quantities as to supply the greater part of her demand, which is principally supplied from foreign countries. Of this kind are all naval stores, masts, yards, and bowsprits, tar, pitch, and turpentine, pig and bar iron, copper ore, hides and skins, pot and pearl ashes. The largest importation of commodities of the first kind could not discourage the growth or interfere with the sale of any part of the produce of the mother country. By confining them to the home market, our merchants, it was expected, would not only be enabled to buy them cheaper in the Plantations, and consequently to sell them with a better profit at home, but to establish between the Plantations and foreign countries an advantageous carrying trade, of which Great Britain was necessarily to be the center or emporium, as the European country into which those commodities were first to be imported. The importation of commodities of the second kind might be so managed too, it was supposed, as to interfere, not with the sale of those of the same kind which were produced at home, but

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[1] The commodities originally enumerated in 12 Car. II, c. 18, § 18, were sugar, tobacco, cotton-wool, indigo, ginger, fustic, and other dyeing woods.

with that of those which were imported from foreign countries; because, by means of proper duties, they might be rendered always somewhat dearer than the former, and yet a good deal cheaper than the latter. By confining such commodities to the home market, therefore, it was proposed to discourage the produce, not of Great Britain, but of some foreign countries with which the balance of trade was believed to be unfavourable to Great Britain.

The prohibition of exporting from the colonies, to any other country but Great Britain, masts, yards and bowsprits, tar, pitch, and turpentine, naturally tended to lower the price of timber in the colonies, and consequently to increase the expence of clearing their lands, the principal obstacle to their improvement. But about the beginning of the present century, in 1703, the pitch and tar company of Sweden endeavoured to raise the price of their commodities to Great Britain, by prohibiting their exportation, except in their own ships, at their own price, and in such quantities as they thought proper. In order to counteract this notable piece of mercantile policy, and to render herself as much as possible independent, not only of Sweden, but of all the other northern powers, Great Britain gave a bounty upon the importation of naval stores from America and the effect of this bounty was to raise the price of timber in America, much more than the confinement to the home market could lower it; and as both regulations were enacted at the same time, their joint effect was rather to encourage than to discourage the clearing of land in America. . . .

The liberality of England, however, towards the trade of her colonies has been confined chiefly to what concerns the market for their produce, either in its rude state, or in what may be called the very first stage of manufacture. The more advanced or more refined manufactures even of the colony produce, the merchants and manufacturers of Great Britain chuse to reserve to themselves, and have prevailed upon the legislature to prevent their establishment in the colonies, sometimes by high duties, and sometimes by absolute prohibitions. . . .

While Great Britain encourages in America the manufactures of pig and bar iron, by exempting them from duties to which the like commodities are subject when imported from any other country, she imposes an absolute prohibition upon the erection of steel furnaces and slit-mills in any of her American plantations.[1] She will not suffer

[1] [23 Geo. II, c. 29.]

her colonists to work in those more refined manufactures even for their own consumption; but insists upon their purchasing of her merchants and manufacturers all goods of this kind which they have occasion for.

She prohibits the exportation from one province to another by water, and even the carriage by land upon horseback or in a cart, of hats, of wools and woollen goods,[1] of the produce of America; a regulation which effectually prevents the establishment of any manufacture of such commodities for distant sale, and confines the industry of her colonists in this way to such coarse and household manufactures, as a private family commonly makes for its own use, or for that of some of its neighbours in the same province.

To prohibit a great people, however, from making all that they can of every part of their own produce, or from employing their stock and industry in the way that they judge most advantageous to themselves, is a manifest violation of the most sacred rights of mankind. Unjust, however, as such prohibitions may be, they have not hitherto been very hurtful to the colonies. Land is still so cheap, and, consequently, labour so dear among them, that they can import from the mother country, almost all the more refined or more advanced manufactures cheaper than they could make them for themselves. Though they had not, therefore, been prohibited from establishing such manufactures, yet in their present state of improvement, a regard to their own interest would, probably, have prevented them from doing so. In their present state of improvement, those prohibitions, perhaps, without cramping their industry, or restraining it from any employment to which it would have gone of its own accord, are only impertinent badges of slavery imposed upon them, without any sufficient reason, by the groundless jealousy of the merchants and manufacturers of the mother country. In a more advanced state they might be really oppressive and insupportable.

Great Britain too, as she confines to her own market some of the most important productions of the colonies, so in compensation she gives to some of them an advantage in that market; sometimes by imposing higher duties upon the like productions when imported from other countries, and sometimes by giving bounties upon their importation from the colonies. In the first way she gives an advantage in the home-market to the sugar, tobacco, and iron of her own colonies, and in the second to their raw silk, to their hemp and flax, to their

[1] [Hats under 5 Geo. II, c. 22; wools under 10 and 11 W. III, c. 10.]

indigo, to their naval-stores, and to their building-timber. This second way of encouraging the colony produce by bounties upon importation, is, so far as I have been able to learn, peculiar to Great Britain. The first is not. Portugal does not content herself with imposing higher duties upon the importation of tobacco from any other country, but prohibits it under the severest penalties.

With regard to the importation of goods from Europe, England has likewise dealt more liberally with her colonies than any other nation.

Great Britain allows a part, almost always the half, generally a larger portion, and sometimes the whole of the duty which is paid upon the importation of foreign goods, to be drawn back upon their exportation to any foreign country. No independent foreign country, it was easy to foresee, would receive them if they came to it loaded with the heavy duties to which almost all foreign goods are subjected on their importation into Great Britain. Unless, therefore, some part of those duties was drawn back upon exportation, there was an end of the carrying trade; a trade so much favoured by the mercantile system. . . .

Of the greater part of the regulations concerning the colony trade, the merchants who carry it on, it must be observed, have been the principal advisers. We must not wonder, therefore, if, in the greater part of them, their interest has been more considered than either that of the colonies or that of the mother country. In their exclusive privilege of supplying the colonies with all the goods which they wanted from Europe, and of purchasing all such parts of their surplus produce as could not interfere with any of the trades which they themselves carried on at home, the interest of the colonies was sacrificed to the interest of those merchants. . . .

But though the policy of Great Britain with regard to the trade of her colonies has been dictated by the same mercantile spirit as that of other nations, it has, however, upon the whole, been less illiberal and oppressive than that of any of them.

III. Workings of the Colonial Policy in England

A. *Balance of Trade Theory, 1630*[1]

An important phase of the mercantile system, though by no means the whole of it, was the insistence upon the desirability of amassing within the country a great

[1] *England's Treasure by Forraign Trade.* By Thomas Mun (London, 1664). In Economic Classics. Edited by W. J. Ashley (New York, 1895), 7–8.

store of the precious metals. Since England had no mines of her own, either at home or in her colonies, she could hope to obtain this only by exporting more commodities than she imported and receiving the difference in gold and silver, that is by maintaining a so-called favorable balance of trade. This was perhaps first clearly stated by Thomas Mun, an English merchant and director in the East India Company. His book was written in 1630, but was not published till thirty years later.

Although a Kingdom may be enriched by gifts received, or by purchase taken from some other Nations, yet these are things uncertain and of small consideration when they happen. The ordinary means therefore to encrease our wealth and treasure is by *Forraign Trade*, wherein wee must ever observe this rule; to sell more to strangers yearly than wee consume of theirs in value. For suppose that when this Kingdom is plentifully served with the Cloth, Lead, Tinn, Iron, Fish and other native commodities, we doe yearly export the overplus to forraign Countries to the value of twenty two hundred thousand pounds; by which means we are enabled beyond the Seas to buy and bring in forraign wares for our use and Consumptions, to the value of twenty hundred thousand pounds; By this order duly kept in our trading, we may rest assured that the Kingdom shall be enriched yearly two hundred thousand pounds, which must be brought to us in so much Treasure; because that part of our stock which is not returned to us in wares must necessarily be brought home in treasure.

B. *The Purpose of the Navigation Acts, 1764*[1]

The conception of the acts of trade as a series of measures designed to promote the interests of the British Empire as a whole, in which the colonies were regarded as parts of a larger whole, is here presented by ex-Governor Pownall. Properly administered they would create "a grand marine empire."

The laws of trade respecting America, were framed and enacted for the regulating *mere plantations;* tracts of foreign country, employed in raising certain specified and enumerated commodities, solely for the use of the trade and manufactures of the mother-country — the purchase of which the mother-country appropriated to itself. These laws considered these plantations as a kind of farms, which the mother country had caused to be worked and cultured for its own use. But the spirit of commerce, (operating on the nature and situation of these external dominions, beyond what the mother country or the

[1] *The Administration of the British Colonies.* By Thomas Pownall (London, 1774), I, 251–2.

Colonists themselves ever thought of, planned, or even hoped for) has *wrought up these plantations to become objects of trade;* has enlarged and combined the intercourse of the barter and exchange of their various produce, into a very complex and extensive commercial interest: The operation of this spirit has, in every source of interest and power, raised and established the *British government on a grand commercial basis;* has by the same power, to the true purposes of the same interest, extended the British dominions through every part of the Atlantic Ocean, to the actually forming A GRAND MARINE EMPIRE; if the administration of our government, will do their part, by extending the British *government* to wheresoever the British *dominions* do extend.

C. *Advantage to England of Colonial Shipping, 1740* [1]

According to the prevailing mercantilist doctrine the building up of a strong navy and of a merchant marine was essential to a nation's strength. Consequently the New England colonies were particularly valuable as they aided England by the building of ships, the production of naval stores, and the development of the carrying trade.

I have heard some People exclaim against some of the Northern Colonies, and look upon them as Rivals to their Mother Country, and particularly in regard to this Article of Shipping and supplying *Europe* with Rice and Corn. This Notion seems to me to be ill grounded, for if Ships were restrained from being built in those *American* Parts, what an immense Quantity of Cash would go out of this Kingdom, to purchase Ships as well as Materials for Building, at *Norway* and other foreign countries, since it is a received Opinion that there is not Timber enough in *England*, at a convenient Distance, to answer the Demands of the *British* Navigation, without great Prejudice to his Majesty's Navy. And what a Stagnation would there be to the Vent of almost all Sorts of *British* Produce and Manufactures, which now go to those *American* colonies, to build ships, and to carry on the many branches of Trade that arise from our Plantations, and bring home to *Great Britain* such vast Quantities of Sugar, Tobacco, Shipping, Naval Stores, Rice, Rum, Furs and Train-Oil, besides Ginger, Cotton, Indigo, Piemento, Cocoa, Coffee, Aloes, Dying-Wood, and other *American* Products? And by a Circulation of Trade a considerable Balance is thereby brought home to the na-

[1] *Memoirs and Considerations concerning the Trade and Revenues of the British Colonies in America.* By John Ashley (London, 1740), 22–25, *passim.*

tional Stock from several Countries of *Europe*, whereby we received no small share of the Products of the Mines of *Brazil*, *Peru* and *Mexico:* The flourishing State of this grand Commerce, and the Revenues arising therefrom, are in no small degree owing to *a low freight, occasioned chiefly from our building Ships so cheap in our* American *Plantations*. . . .

The Northern Colonies are a great Support to the naval Power of *Great Britain*, and assist in great Measure in giving us a Superiority at Sea over all other Nations in the World: They add largely to our Trade and Navigation the Nursery of Seamen; the Indulgence given them by granting a bounty upon the importation of Pitch, Tar and Turpentine, has answered the intention as they have thereby brought the Prices of those Commodities from upwards of 50s. per Barrel, down to 10s. per Barrel and under; which is attended with this further Convenience, that it aids them in making Returns for the immense Quantity of Goods that are exported from *Great Britain* to those Colonies, and it also prevents five times the Value thereof from going out of the Kingdom in Cash to *Sweden*, and other Foreign Countries. And they also supply the King's Yards with great Quantities of Masts, Yards and Bowsprits, instead of those of foreign Growth, and may in Time, with proper Encouragement, do the like in regard to *Hemp* and *Iron*, and even with this further Advantage, that *British* Produce and Manufactures will purchase what is of the Produce of our own Plantations, and Cash chiefly must go to purchase what is of the Produce of foreign Countries.

D. *The Colonies a Source of Raw Materials, 1775*[1]

Throughout the seventeenth and the first half of the eighteenth centuries the colonies were esteemed by England chiefly as sources of raw materials and commodities not produced at home. As long as this point of view prevailed the West Indies and the southern colonies in North America were valued more highly than the northern colonies, since they were in a different climatic zone than England and thus yielded products which were in demand there. This view finds constant expression in the pages of *American Husbandry*, though by the time it was published a different theory had begun to control colonial policy.

It may not be improper here to review the staples of these colonies, the southern ones, and the islands, as they all unite in the circumstance of having such valuable staples as render them in every respect highly valuable to Great Britain, and more so than other settlements more to the north can prove. The commodities chiefly produced in

[1] *American Husbandry*. By an American (London, 1775), II, 231–4, *passim*.

all our settlements, from Maryland to Grenada, are such as we cannot have at home, of which we consume great quantities, which must be purchased of foreigners, and perhaps of enemies, if we had not colonies that produced them. . . . A late writer from whom however I have had reason in the preceding pages to differ in certain articles, gives the following table of the tobacco and southern colonies.

	Exports from Britain	*Exports from Colonies*
Virginia and Maryland	[£]865,000	[£]1,040,000
North Carolina	18,000	68,350
South Carolina	365,000	395,666
Georgia	49,000	74,200
St. Augustine	7,000	.....
Pensacola	97,000	63,000
	[1] 1,401,000	1,641,216
West Indies [2]		2,702,060
		4,343,276

. . . . These therefore are colonies that it much behoves this country to give every degree of encouragement to that it is possible they should receive; for by encouraging them, she in fact encourages herself. . . .

E. *The Colonies as a Market for British Manufactures, 1755* [3]

About the middle of the eighteenth century the doctrine began to gain ground that the colonies were to be esteemed chiefly as markets for English manufactures. England was already entering upon the industrial development which was shortly to culminate in the industrial revolution. From this point of view the colonies most to be esteemed were the northern continental ones, which were growing much more rapidly in population and consuming power than the West Indies or the southern colonies. This is the point brought out by Clarke. He was a physician in Boston.

The Advantage accruing to the Mother-Country from the great Number of Inhabitants in her Northern Colonies, will appear from the Consideration of the Consumption they will occasion of *British* Manufactures, and also of all other *European* Commodities in general, which last must be landed and re-shipped in *Great-Britain* (which is by the Acts of Trade made the Staple of them for all the *English* Colonies) before they can be imported into *America*.

[1] *American Traveller.* [2] *Political Essays.*

[3] *Observations on the Late and Present Conduct of the French, with Regard to their Encroachments upon the British Colonies in North America.* By William Clarke (Boston, 1755), 33–4.

I shall not enter into a Detail of the *European* Commodities which are consumed within the Colonies, or a Computation of what Number of Hands their present Inhabitants may employ in *England*, for furnishing them with the *British* ones: Extracts from the Custom-house Books of the Goods exported for the Colonies, have shewn them to be very large at present; what is exported for *New-England* only amounting to *Four Hundred Thousand Pounds Sterling per Ann.* and the future Vent of them continually increasing in Proportion to the Growth of its Inhabitants, must of itself in Time become a more considerable Trade, and of a more beneficial Nature in every Respect to *Great-Britain*, than all its Branches of Commerce with foreign States put together. It is computed that near Half the present Shipping of *Great-Britain* is improved in the Commerce carried on with her Plantations, which Trade alone will in Time employ a much greater Quantity of Shipping, than all the present Shipping of *Great-Britain*. Besides, this Trade will enable her with greater Advantage to extend her Commerce with other Countries.

F. *Trade between England and Her North American Colonies, 1700–1780*[1]

Though compiled to show something else the following table illustrates the reason for the changed attitude of England toward the colonies as stated in the two previous selections. It will be noticed that down to 1740 England had imported more from the colonies every decade than she had exported to them; in other words they were valuable as sources of supplies which England desired. On the other hand in every decade after 1740 the exports to the colonies exceed the imports from them, and in a rapidly increasing proportion; in other words the colonies are becoming increasingly valuable as markets for British manufactures.

	Imports from that part of America now UNITED STATES			*Exports to*		
Average	£	s.	d.	£	s.	d.
from 1700 to 1710	265783	0	10	267205	3	4
" 1710 " 1720	392653	17	1½	365645	7	11¾
" 1720 " 1730	518830	16	6	471342	12	10½
" 1730 " 1740	670128	16	0½	660136	11	1¼
" 1740 " 1750	708943	9	6¼	812647	13	0¼
" 1750 " 1760	802691	6	10	1577419	16	2½
" 1760 " 1770	1044591	17	0	1763409	10	3
" 1770 " 1780	743560	10	10	1331206	1	5

[1] *Observations on the Commerce of the American States.* By Lord John Sheffield (2d edition, London, 1784), Appendix, 24.

IV. Workings of the Colonial Policy in the Colonies

A. *Arguments for and against the Molasses Act, 1731* [1]

In order to protect the sugar planters in the British West Indies, it was proposed in Parliament in 1731 to prohibit the importation of sugar, rum, or molasses into England or her American colonies from the French, Dutch, or Spanish West Indies. As these articles could be had more cheaply in the foreign islands than in the British ones, a very lucrative trade had sprung up between these islands and the British American colonies, which was of great benefit to both parties. The arguments that preceded the passage of the so-called Molasses Act, which in 1733 placed heavy duties upon this trade, are here briefly given.

The merchants trading to the British sugar colonies and the planters, having petitioned the House of Commons, "complaining against the British Continent American Colonies, for their carrying on a trade with the foreign sugar colonies of the French and Dutch, from whence they were supplied with sugar, rum, melasses, &c. instead of those of our own sugar colonies, as well as with foreign European goods and manufactures; contrary to the tenor or intention of the laws in being, and of the treaty with France, in the year 1686;" (of which see our abstract under that year) "And they alleged, that as this new method of trade" (first begun to be complained of in the year 1715) "increased, and enriched the colonies of other nations, so that it was injurious to the trade of this kingdom, and greatly impoverished the British sugar colonies; and therefore praying relief therein." Whereupon a committee was appointed, upon whose report a bill was brought in, and passed the House of Commons, "For the better securing and encouraging the Trade of his Majesty's Sugar Colonies.". . .

Section I, "No sugar, rum, or melasses, of the plantations of foreign nations, shall be imported into Britain or Ireland, or to any of the King's dominions in America, under forfeiture of lading, ship and furniture.". . .

Let us next, as briefly as possible, hear the allegations on both sides for and against this bill. In support of the bill, it was urged, both within doors and in several pamphlets and newspapers, "That the supplying the French and Dutch sugar colonies, with shipping, often sold to them, as also provisions, horses, and lumber, from our continent colonies, had been practiced ever since the peace of Utrecht; and that the so doing, not only made those necessary commodities

[1] *An Historical and Chronological Deduction of the Origin of Commerce.* By Adam Anderson (London, 1787), III, 177–82.

cheaper to them than they could have them any where else, but it also obliged the importers to take in payment great quantities of the said French and Dutch sugars, rum, and melasses, to the infinite detriment of the British sugar colonies: and, what is still more grievous and detrimental to the public, that intercourse affords our Northern continental colonies an opportunity of being supplied with French European merchandize, although prohibited by law. . . .

"4. That for the encouragement of the said continental colonies to persist in the said trade, they have the rum and melasses from those foreign colonies without the high duties paid for them when imported into Britain; — that melasses was formerly of little or no value to the French planter, because rum was detrimental to France, as interfering with the consumption of their brandy, until the French found they could sell it to our continental people, in return for timber, horses, oxen, and provisions, so needful for them; whereby also they saved so much money in specie; — and that even the money which they receive at our own sugar islands, in payment for their lumber, provisions, horses, &c. is now carried to the French sugar islands for the purchase of their melasses and rum. Near one-half of the goods which our continental people now carry to our own sugar islands, being paid for in money, and not by barter, as formerly; whereby the French are enabled to increase their settlements, and also their negro trade. . . .

On the other hand,

It was insisted, in behalf of the British northern continent colonies of America, viz. New England, Rhode Island, New York, Pennsylvania, and the Jerseys,

"I. That as all the sugar, rum, and melasses of our sugar isles are taken off at high prices by Great Britain and our said northern colonies; it would be very impolitic to obstruct the latter from taking melasses, and even rum, from the French islands, for the supply of their Indian trade, and much more of their fisheries: as our own sugar colonies are unable to supply the immense quantities of melasses which those two trades demand; more especially as from the French islands they receive in payment silver and cocoa, as well as melasses, (but seldom sugar or rum) which silver comes ultimately to Great Britain to pay for the balance of trade: and the said northern colonies distil the melasses into rum, for the above-named purposes.

"II. That by this trade the northern colonies are enabled to make such considerable remittances to England, in ready money, as they could procure no where else but by their traffic with the foreign colo-

nies, as well as by indigo, cocoa, sugar, and rum, both from British and foreign colonies, for enabling them to pay for the great quantities of our manufactures which they yearly take of us. . . .

"VI. That the consumption of rum in New England is so great, that an author on this subject asserts, that there had been twenty thousand hogsheads of French melasses manufactured into Rum, at Boston, in one year: and as a gallon of melasses will make a gallon of rum, this will amount to one million two hundred and sixty thousand gallons of rum in one year: so vast is the demand for that liquor, by their fishery, and by the Indian trade. If then, the trade from New England to the French islands was to be prohibited, how much would our American fishery, and the Indian trade suffer for want of rum? Seeing that all the rum from our own sugar colonies is now entirely taken off by Great Britain and her colonies. . . .

"Lastly, that the prohibiting the continental people from purchasing of the foreign colonies their sugar, rum, and melasses, or even laying high duties on them, would utterly destroy a commerce of such great consequence to the northern colonies, as that without it they could not carry on their fisheries, — their trade for peltry with the Indians, and their navigation. Neither could they dispose of the product of their lands and labour, a great part of the profits whereof centers in Great Britain, in payment of the manufactures, &c. they have from thence. Upon the whole," say the advocates for the Northern British colonies, "the secret and real view of the Sugar Islands, is, to gain the absolute monopoly of sugar and rum, with respect to the subjects of Great Britain, to themselves; that so they may have it in their power to exact what prices they shall please from the buyers."

Notwithstanding all which plausible allegations on both sides, in a matter of great importance to our commercial interests, there was nothing legally decided until two years later, viz. till the year 1733.

B. *Ineffectiveness of the Molasses Act, 1740* [1]

As finally passed, the Molasses Act did not prohibit the trade between the foreign West Indies and the British American colonies in sugar, rum, and molasses, but it placed very heavy duties upon their importation. If these duties had been collected this trade would have been destroyed, but under the policy of "salutary neglect" that prevailed the law became practically a dead letter until 1764.

The *British* Legislature willing to support and encourage his Majesty's Plantations in *America*, and particularly the Sugar Islands,

[1] *Memoirs and Considerations concerning the Trade and Revenues of the British Colonies in America.* By John Ashley (London, 1740), 35–40, *passim.*

have thought fit to charge all foreign Sugar, Penneles,[1] Rum, Spirits, Molasses and Syrups, imported into *Great Britain*, with certain Duties which are abundantly higher than the Duties upon the like Species of *British* Growth.

By an Act pass'd in the 6th Year of King *Geo.* II. *cap.* 13. [1733] all these Commodities are prohibited from being imported into *Ireland*, and a Duty of five Shillings *per* Hundred is laid on Sugar or Penneles, nine Pence *per* Gallon on Rum or Spirits, and six Pence *per* Gallon on Molasses and Syrups of the Product of any Plantation in *America*, not in the Possession of his Majesty, imported into any of the *British* Plantations in *America*, . . .

NOTWITHSTANDING these good and wholesome Laws for encouraging the *British* Sugar Colonies, and discouraging those of Foreigners, it is well known that they are notoriously evaded, and great Quantities of foreign Sugar, Rum, and Molasses are clandestinely imported for a *British* Consumption, without paying more Duties than the *British* Subject, and in some Instances without paying any Duties at all. . . .

THE high Duty of six Pence *per* Gallon Sterling on foreign Molasses imported into the British Colonies, and the small Number of Officers on the extensive Shores of the Northern Provinces, for want of a Fund to pay Salaries to proper Officers, obstructs the Intention of that Part of the said Act, passed in the 6th Year of the Reign of King *George* II [1733], for the better securing and encouraging the Trade of his Majesty's Sugar Colonies in *America*, since there is as much foreign Molasses imported into those Northern Colonies as there was before the passing of that Act, which cannot amount to less than 10,000 Hogsheads, or 1,000,000 of Gallons *per Annum*, and little or no Duties have been paid by virtue of that Act, notwithstanding the several Precautions before mentioned. And considerable Quantities of foreign Sugar and Rum are also frequently imported into those Northern Provinces without paying any Duties at all.

C. *Smuggling in the Colonies, 1757* [2]

It was inevitable that efforts should be made by the colonists to evade the navigation acts when these interfered with a profitable branch of trade, and as a

[1] A coarse sort of sugar made from molasses.

[2] *Report of Sir Charles Hardy to the Lords of Trade* (1757). In Documents relating to the Colonial History of New York. Edited by E. B. O'Callaghan (Albany, 1856), VII, 271.

matter of fact a great deal of illegal trade was carried on down to the very time of the Revolution. The following letter from Sir Charles Hardy, former governor of New York, to the Lords of Trade, shows something of the extent of this trade.

Halifax, 10th July 1757

My Lords,

. . . As I have now taken leave of the Province of New York as Governor . . . I trust I shall stand excused to you in offering my thoughts upon two Subjects: in the first the mother country is greatly Interested with regard to its trade with the Colonys which I have used all my endeavours to restrain and put upon a proper footing, and thô I have not been able to do it so effectually as I could wish, yet I flatter myself some good has attended it, and I am sure greater will follow by your Lordships' Interposition with the Treasury and Custom House Boards: I mean the introducing tea, canvas, Gunpowder and arms for the Indians and many other Articles from Holland that render to His Majesty no Dutys in Europe, and almost totally discourage the Importation of these commoditys from Brittain. When I first arrived at New York I found this iniquitous trade in a very flourishing state, and upon inquiry was informed that it had been a common practice for Vessels to come from Holland, stop at Sandy Hook, and smuggle their Cargoes to New York and carry their Vessels up empty; this I was determined to put an end to, when this Trade took another course by sending their Vessells to the Ports of Connecticutt, from whence it is not very difficult to introduce their goods thrô the sound to New York, and even to Philadelphia; I acquainted Governor Fitch with some informations I had obtained of this practice, and requested him to direct the Custom House Officers of his Colony to do their duty, assuring him I would direct the King's Officers in my Province to seize any goods they could find Any Body attempting to introduce into my Government; I believe some small seizures was made in Connecticutt upon it, but much more in the Province of New York. Another method the Importers take is to stop at some of the Out ports of Britain (in their outward bound passage from Holland) and make a report and enter only half of their cargo, by which the King is defrauded of his Duty on the other half; In short My Lords, if some effectual means are not used, the greatest part of the commerce of the American Colonies will be withdrawn from the Mother Country, and be carryed to Holland.

D. *An Act to Prevent Iron Manufactures in the Colonies, 1719*[1]

The determination to crush out manufactures in the colonies in order to reserve them as a market for English goods showed itself early in the colonial policy, as shown in the proposed legislation of 1719. The project was revived again about twenty years later, but not until 1750 did the agitation result in legislative action. In this year an act was passed allowing the free importation into England of colonial pig-iron, and of bar-iron at the port of London, but prohibiting iron manufactures in the colonies. By this time the colonies were sufficiently developed to undertake simple manufactures, and this act caused irritation against the colonial policy of England.

In this same year 1719, a bill was brought into Parliament, For rendering the laws concerning the importation of naval stores from the British American plantations more extensive, by extending it to all sorts of timber from thence. . . . But the people of the northern colonies were so surprised and disappointed, on account of certain clauses put into that bill, that, rather than they should stand part of it, they were very glad to have it dropped altogether. Such, for instance, as

"That none in the plantations should manufacture iron wares of any kind whatever, out of any sows, pigs, or bars whatsoever; under certain penalties:" — By which clause, says an ingenious author, on this occasion, in behalf of the colonies, no smith in the plantations might make so much as a bolt, spike, or nail; whereby the colonies must have been brought into a miserable condition; the smith being, above all other trades, absolutely necessary in all other employments there. Amongst the rest, that of ship-building would have hereby been utterly destroyed, although by that article they make a great part of their returns for the purchase of British manufactures.

The House of Peers added another clause, "That no forge going by water or other work whatsoever, should be erected in any of the said plantations, for the making, working, or converting of any sows, pigs, or cast-iron, into bar or rod-iron, upon pain, &c." — This second clause, says our said author, must have ruined all the iron-works in the colonies, to the great loss of their proprietors, and have given the French a fair handle to tempt them into their settlements which join to ours.

The chief opposers of the manufacture of iron in our American plantations, were the proprietors of our iron-works at home: . . .

[1] *An Historical and Chronological Deduction of the Origin of Commerce.* By Adam Anderson (London, 1789), III, 88.

E. *Colonies Levy Tariff Duties on British Goods, 1718* [1]

The acts cited below were disallowed by the English government, but the fact that they were passed shows a striking disregard for the British acts of trade and a strong desire on the part of the colonies to regulate their trade in their own way. There were many similar acts passed by the colonial legislatures of which these are typical.

Having received from the Commissioners of your Majestys Customs the Extract of a Letter to them from Colonel Rhett Surveyor and Comptroller of the Customs in Carolina, dated in December last . . . whereby it appears that an act was then passed in that province of a pernicious Consequence to the Trade and Navigation of this Kingdome laying a Duty of 10 per Cent. upon all Goods of British Manufactory, imported into that Province from Great Britaine. . . Yet, considering the ill consequence of such an Act, . . . Wee most humbly Offer that your Majesty's Pleasure be Signifyed to the Lords Proprietors of Carolina, that they immediately send over to that province their Disallowance of the Same, with directions to their Governor there, never to Give His Assent to any Law of the like Nature, for the future.

Wee humbly take leave to represent to your Majesty. — That by the Act of Trade 15° Caroli 2di. [1663] No Goods of the Growth or Manufacture of Europe can be imported into any of the plantations but from Great Britain, excepting Salt for the Fisherys, Wines of the Madera and Western Islands, Servants Horses and Provisions from Ireland, and also except Irish Linnen from Ireland by the Act, the 3° and 4° Annæ; Whereas this Act of the Massachusetts Bay, not only Allows the importation of All Sorts of Wines and Commoditys directly from the place of their Growth, but charges the said Commoditys with a double duty, if Imported from this Kingdom, from whence only they can legally be imported, except in the cases above-mentioned, besides that there are no Words to Restrain the Importation of such Goods into that Plantation to Such Ships only as by Law may trade thither: — This Act likewise lays a duty of one per Cent. on all English Merchandizes when at the same time it lays not half that duty on any other Goods, and Merchandize, and as a farther discouragement to the British Trade and Navigation, lays a Duty of Tonnage on all Shipping except that of the Massachusetts Bay, and of some few of its neighbouring Colonies: . . .

[1] *Acts of the Privy Council*, Colonial Series, (London, 1908) II, 740, selection 1294; 759, selection 1315.

F. *Tobacco Growing Suppressed in England, 1619–1670* [1]

While most attention has been given to restrictions imposed upon colonial development by the acts of trade, it must be remembered that along with the policy of restriction there went also the policy of encouragement. Perhaps no more striking illustration of this can be given than the legislation relative to the growing of tobacco in England. In order to encourage its production in the colonies, and also to render the administration of the customs duties easier, its growth was rigidly suppressed in England, until at last it was absolutely stamped out. While colonial tobacco could be exported only to England, at least it was protected there from English competition.

Whitehall, 3 September [1626]: . . .

A warrant directed to Henry Somerscales, gentleman of the County of Nottingham or to his Deputie. These are to will and comande you to make your presente and undelayed repaire unto the house or houses of all such persons within the Countyes of Buckingham Lincolne and Yorke, or any other County Cittie or Towne within the Realme of England onely the Citties of London and Westminster or the Suburbs thereof excepted as you shall either knowe, or be probably informed, to receive, conceale, kepe, now sell, or have in their custodie anie Tobacco of the English growth or making, or anie Spanish or foreigne growth or making, or anie Spanish or foreigne Tobacco, except onely such as is of the growth of the English Plantations in foreigne parts [All such tobacco is to be seized and a bond of £100 apiece to be taken of its possessors to appear before the Board to answer for their high contempt].

Whitehall, 21 December [1627]: . . .

This day the Boord, in the presence of his Majestie and by his speciall direction, takeing into their considerations, the english plantations in Virginia, and the Sommer Islands especially, and consideringe that for the present they cannot subsist, but by the vent of their Tobacco planted there, and from thence transported heather, haue thought fitt and soe resolued and ordered: That for the preservation and incouragement of those English plantations abroad, no Tobacco shalbe planted either in England, or Ireland, or any the Islands thereto belonginge, nor any such Tobaco shall be brought: or sold, vttered or vsed, by any but shalbe vtterly destroyed, and consumed wheresoeuer it shalbe found either simply, or mixt, with any other Tobacco; . . . and no Spanish Tobacco, or other Tobacco,

[1] *Acts of the Privy Council*, Colonial Series (London, 1908), I, 109–10, 120–1.

of the growth of any of the King of Spaines Dominions shall be imported into this Realme, other then such as shalbe imported by his Majesties Agents only, and only for his Majesties vse. . . .

G. *Bounties on Colonial Products, 1764*[1]

While regulating the trade and suppressing the manufactures of the colonies, the English government encouraged by a system of bounties the production of certain articles that were desired in England. The production of indigo, hemp, flax, timber, naval stores, and similar commodities were stimulated in this manner. As an illustration the bounty granted on hemp is here described.

In order to obtain a cheaper and surer supply of hemp and flax, and to encourage the production of it in the American colonies, the parliament granted a bounty of £8 on every tun of clean merchantable hemp, or rough flax, imported from the British American colonies from 24th June 1764 to 24th June 1771, and thence to 24th June 1778 a bounty of £6, and thereafter to 24th June 1785 of £4; the pre-emption of all such hemp and flax being offered to the commissioners of the navy, and twenty days being allowed for their determination before the importer could be at liberty to sell it to a private buyer.

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[1] *Annals of Commerce, Manufactures, Fisheries, and Navigation.* By David Macpherson (London, 1805), III, 400.

CHAPTER V

ECONOMIC CAUSES AND CONDUCT OF THE REVOLUTION, 1764–1783

I. Economic Causes of the Revolution

A. *Fear of French Kept Colonies Loyal, 1748* [1]

An extraordinarily accurate prophecy of the future course of events was made by Kalm as early as 1748, in which he foretold the independence of the colonies in from "thirty or fifty years" (i.e. 1778–1798), if the fear of French attack were removed.

It is however of great advantage to the crown of England that the North American colonies are near a country under the government of the French, like Canada. There is reason to believe that the King never was earnest in his attempts to expel the French from their possessions there; though it might have been done with little difficulty: for the English colonies in this part of the world have increased so much in their number of inhabitants, and in their riches, that they almost vie with Old England. Now in order to keep up the authority and trade of their mother country, and to answer several other purposes, they are forbid to establish new manufactures, which would turn to the disadvantage of the British commerce: they are not allowed to dig for any gold or silver, unless they send them to England immediately; they have not the liberty of trading to any parts that do not belong to the British dominions, excepting some settled places; and foreign traders are not allowed to send their ships to them. These and some other restrictions, occasion the inhabitants of the English colonies to grow less tender for their mother country. This coldness is kept up by the many foreigners, such as Germans, Dutch, and French, settled here, and living among the English, who commonly have no particular attachment to Old England; add to this likewise, that many people can never be contented with their possessions, though they be ever so great, and will always be desirous of getting

[1] *Travels into North America.* By Peter Kalm (London, 1770). In Pinkerton, Voyages and Travels, XIII, 461.

more, and of enjoying the pleasure which arises from changing; and their over great liberty, and their luxury, often lead them to licentiousness.

I have been told by Englishmen, and not only by such as were born in America, but even by such as came from Europe, that the English colonies in North America, in the space of thirty or fifty years, would be able to form a state by themselves, entirely independent on Old England: but as the whole country which lies along the sea-shore is unguarded, and on the land side is harrassed by the French in times of war, these dangerous neighbours are sufficient to prevent the connection of the colonies with their mother country from being quite broken off. The English government has therefore sufficient reason to consider the French in North America as the best means of keeping the colonies in their due submission.

B. *Prohibition of Western Expansion, 1763–1772* [1]

One of the little emphasized but important causes of discontent among the colonists was the prohibition of westward expansion and of settlements beyond the Alleghany mountains. This was particularly irritating to the people of Virginia with their large charter claims to western lands. The Royal Proclamation of 1763, by the British government, forbade any governor "to grant warrant of survey, or pass patents for any lands beyond the heads or sources of any of the rivers which fall into the Atlantic Ocean from the west or north-west; or upon any lands whatever, which not having been ceded to, or purchased by us . . . are reserved to the said Indians, or any of them." This restriction of the area of settlement to the seacoast gave rise to protest on the part of the colonists and the matter was considered several times by the Board of Trade, but they each time endorsed the policy laid down in 1763. The following extract from a report made in 1772 sets forth the arguments for and against such a policy.

The object of colonisation in North America has been to improve and extend the commerce, navigation and manufactures of this kingdom, — (1) by the fisheries on the northern coast; (2) by the growth of naval stores and raw produce to be exchanged for manufactures and other merchandise; (3) by securing a supply of lumber and provisions for the island colonies. For these purposes, settlements were confined as much as possible to the seacoast, so as to be accessible to merchant ships and defensible by the British Navy, which could use the ports as stations in time of war. . . .

The arguments in favour of inland settlements are, (1) Such colonies promote population and form a market for English woollens;

[1] *Acts of the Privy Council*, Colonial Series, The Unbound Papers (London, 1911), VI, 513–8, *passim*.

4. "That every *medium of trade should have an intrinsic value*, which paper money has not. Gold and silver are therefore the fittest for this medium, as they are an equivalent, which paper never can be.

5. "That *debtors*, in the Assemblies, make paper money with *fraudulent views*.

6. "That in the middle colonies, where the credit of the paper money has been best supported, the bills have *never kept to their nominal value* in circulation, but have constantly depreciated to a certain degree, whenever the quantity has been increased."

D. *Remonstrance of New York Assembly against Prohibition of Paper Money, 1775* [1]

The significance of the act of Parliament which prohibited the issue of legal tender paper money in the colonies as one of the important causes of the Revolution is now recognized. Its inclusion in a list of grievances by the New York Assembly shows the attitude of the colonists on this point.

"The Representation and Remonstrance of the General Assembly of the Colony of New York. . . .

"We cannot avoid mentioning among our grievances the Act for prohibiting the legislature of this colony from passing any law for the emission of a paper currency to be a legal tender in the colony: our commerce affords so small a return of specie, that without a paper currency, supported on the credit of the colony, our trade and the change of the property must necessarily decrease; without this expedient we never should have been able to comply with the requisitions of the crown during the last war, or to grant ready aids on any sudden emergencies. The credit of our bills has ever been secured from depreciation by the short periods limited for their duration, and sinking them by taxes raised on the people; and the want of this power may, in future, prevent his Majesty's faithful subjects here from testifying their loyalty and affection to our gracious sovereign, and from granting such aids as may be necessary for the general weal and safety of the British empire: nor can we avoid remonstrating against this Act, as an abridgement of the royal prerogative, and a violation of our legislative rights. . . .

"Assembly Chamber, City of New York, the 25th day of March 1775."

[1] *The Parliamentary History of England.* By Hansard (London, 1813), XVIII, 653.

E. *The Enforcement of the Navigation Acts, 1764*[1]

The Seven Years' War in America had resulted in the expulsion of the French, which was an advantage to the colonies, but had left Great Britain with a largely increased debt. It was determined therefore to establish a standing army in the colonies, to the support of which the colonists must contribute by means of a new system of taxes. At the same time the navigation acts were to be vigorously enforced with the aid of British ships of war, paper money prohibited, and the reins of government drawn more tightly about the colonies. These different acts of the year 1764 were passed under the leadership of Charles Townshend, who was the first lord of trade and intrusted with the administration of the colonies. They are sympathetically described by an English author.

The entire cession of the French possessions in North America, was a subject of trembling expectation in the minds of many who were, by no means, in the habit of employing their reason in idle speculations. While this vast extent of country remained in the possession of France, it certainly operated as a powerful restraint upon the colonies, and by keeping them in perpetual alarms, obliged them to have continual recourse to the parent state for aid and protection. The acquisition therefore of Canada, &c. by freeing the British North American colonies from all apprehensions on that dangerous quarter, afforded them a security which they had never known; and, of course, gave leisure for the progress of those ideas, which otherwise might indeed have occasionally risen into existence, but would never have attained to any degree of maturity.

While France possessed this ceded territory, she must, in the most confidential moments of peace, have been considered, from her American position, exclusive of all other circumstances, as a natural enemy to British America; and while that idea remained, the connection between Great Britain and her Colonies must have subsisted. The one would have wanted protection, and the other would have required obedience; and these reciprocal obligations would have preserved their union unbroken in every circumstance of it.

Thus the conclusion of the war between Great Britain and France, placed the North American colonies in a situation of advantage which they had never before known, and gave them an unexperienced opportunity to exert all that natural vigour which they have since manifested. That they should now begin to feel their consequence, was a matter of natural expectation; and that the wish to realize it, in some degree, by enlarging their privileges, or pressing a little on what

[1] *An Historical and Chronological Deduction of the Origin of Commerce.* By Adam Anderson (London, 1789), IV, 61–5.

might be considered as the exuberance of parental authority, should be encouraged among them, was the result of their prosperous and powerful condition. . . .

At this time, therefore, and when all these circumstances were evident to the most common observation, it was surely the true policy of Great Britain to have employed the most temperate measures in her government of the American colonies; and it was at this moment that she began to exercise her power, though not indeed without consideration; for the minister of that period was not in the habit of committing rash actions. . . .

The methods which were now adopted to prevent smuggling, might not have been attended with any unpleasant consequences, if they had been confined to the coasts of Great Britain and Ireland; but by extending them to the shores of America, they interrupted a commerce, which though not strictly legal, was extremely advantageous to the colonies. They were therefore in a state of no common discontent on account of the acts of the British Parliament which added to their restraints, when the stamp act appeared to heighten their resentment, and raise a kind of private displeasure into public remonstrance and general opposition.

A number of armed cutters were stationed around the coasts of Great Britain, and the most rigid orders were issued to the commanders of them to act in the capacity of revenue officers. They were enjoined to take the usual custom-house oaths, and to observe the regulations prescribed by them. Thus was the distinguished character of a British naval officer degraded by the employments of a tide-waiter, and that active, zealous courage which had been accustomed to the conquest of an enemy, was now to be exerted in opposing a contraband trade, and to find a reward in the seizure of prohibited commodities.

The clamour against these measures was loud in England; but in America the discontent on the occasion was little short of outrage. As naval gentlemen, the commanders of these vessels were not conversant in the duties of revenue collection, they were therefore oftentimes guilty of oppression; remedies were indeed at hand in England; but as the Lords of the Admiralty or the Treasury could alone rectify any errors, check any violence, punish any injustice, or restore any violated property, it was always extremely difficult, and in many cases almost impracticable, for the Americans to obtain redress.

But bad as this evil was, there arose one, from the same source, which was still worse. — A trade had been carried on for more than

a century between the British and Spanish colonies in the new world, to the great advantage of both, but especially the former, as well as of the mother country; the chief materials of it being on the side of the British colonies, British manufactures, or such of their own produce as enabled them to purchase British manufactures for their own consumption; and, on the part of the Spaniards, gold and silver in bullion and coin, cochineal and medicinal drugs, beside live stock and mules; which, in the West India plantations, to which places alone these last articles were carried, from their great utility, justly deserved to be considered of equal importance with the most precious metals.

This trade did not clash with the spirit of any act of Parliament made for the regulation of the British plantation trade; or, at least with that spirit of trade which universally prevails in our commercial acts: but it was found to vary sufficiently from the letter of the former, to give the new revenue officers a plea for doing that from principles of duty, which there were no small temptations to do from the more powerful motives of interest. Accordingly, they seized, indiscriminately, all the ships upon that trade, both of subjects and foreigners; which the custom-house officers stationed on shore, either through fear of the inhabitants, a more just way of thinking, or an happy ignorance, had always permitted to pass unnoticed.

As the advantage of this commerce was very much in favour of Great Britain, the Spanish monarchy had always opposed it: guarda-costas were commissioned to scour the coasts of her American dominions, and to seize every vessel which approached too near them; a duty which they had exercised with such general licence, as to provoke the war which broke out in 1739. The British cruizers seemed to act at this time with the same spirit in destroying this commerce, so that in a short space of time it was almost wholly annihilated.

This circumstance was to the northern colonies a deprivation of the most serious nature. — This traffic had long proved the mine from whence they drew those supplies of gold and silver that enabled them to make copious remittances to England, and to provide a sufficiency of current specie at home. A sudden stop being thus put to such a source of advantage, the Americans expressed the injury they sustained in the harshest terms that a sense of injury could inspire. But in spite of all complaints, the ministry continued to proceed in their unfortunate career, and measures equally offensive to the inhabitants of the North American colonies continued to be successively adopted.

Besides this trade carried on between the British colonies in general, especially those in the West Indies, and the Spanish, there had for a long time subsisted one equally extensive between the British North American colonies in particular, and those of the French West Indies, to the great advantage of both, as it consisted chiefly in such goods as must otherwise have remained upon the hands of the possessors; so that it united, in the strictest sense, all those benefits which liberal minds include in the idea of a well regulated commerce, as tending, in the highest degree, to the mutual welfare of those who were concerned in it.

In these benefits the respective mother countries had, without doubt, a very large share, though it may be impossible to determine which, upon the whole, had the most. We had enough to engage those in power to think it worth connivance, for it certainly was not strictly to law, in consideration of the vast quantity of manufactures it enabled our American colonies to take from us; . . .

Through the suppression of that trade which we have just been relating, instead of barely interrupting these supplies of the necessaries and conveniences of life, which the North American colonies were before accustomed to receive in return for their superfluities and incumbrances, tended visibly, by obstructing their internal commerce, to deprive them, in a great degree, even of those blessings, the sources of which lay within themselves; yet a law was made in the beginning of the last year [1764], which, whilst it rendered legal, in some respects, their intercourse with the other European colonies in the new world, loaded the best part of it with duties so far above its strength to bear, as to render it contraband to all intents and purposes. Besides, it ordered the money arising from these duties to be paid, and in specie, into the British Exchequer, to the entire draining of the little ready money which might be still remaining in the colonies; and within a fortnight after, another law was passed to hinder the colonies from supplying the demand of money for their internal wants, by preventing such paper bills of credit as might be afterwards in them, from being made legal tender in payment; and the legal tender of such bills as were actually subsisting, from being prolonged beyond the periods already limited for calling in and sinking the same.

These new regulations following each other so rapidly, produced an equal degree of surprise and discontent among the people of North America. Warm and spirited remonstrances were sent to England on the occasion.

F. *The Sugar Act of 1764*[1]

By the so-called Molasses Act of 1733 Parliament imposed practically prohibitory duties upon rum, molasses, and sugar imported into the British colonies of North America from the West India islands that belonged to other nations. The duties were 9 d. per gallon upon rum or spirits, 6 d. per gallon upon molasses or syrups, and 5 s. per hundredweight upon sugar. Had these duties been enforced they would have destroyed an important and lucrative trade between the northern colonies and the French West Indies, from which both molasses and rum could be had more cheaply than from the British West Indies. But the act was disregarded and remained practically a dead letter.

In 1764 Parliament decided to enforce the revenue acts and modified the prohibitive duties imposed by the Act of 1733, at the same time providing for their vigorous collection. The so-called Sugar Act of 1764 prohibited the importation of rum or spirits from foreign plantations, raised the duty upon foreign sugars to 22 s. per hundredweight, but reduced that upon molasses to 3 d. As the former act had been inoperative, this was practically equivalent to the imposition of new duties. Sir Francis Bernard, Governor of Massachusetts, was one of the more liberal and farsighted British officials in America and warned his country of the consequences if the Sugar Act were enforced.

The publication of orders for the strict execution of the Molasses Act has caused a greater alarm in this country than the taking of *Fort William Henry* did in 1757. Petitions from the trading towns have been presented to the General Court; and a large Committee of both Houses is sitting every day to prepare instructions for their Agent. In the mean time, the Merchants say, There is an end of the trade in this Province; that it is sacrificed to the *West Indian* Planters; that it is time for every prudent man to get out of debt with *Great Britain* as fast as he can, and betake himself to husbandry, and be content with such coarse manufactures as this country will produce. This is now the common talk wherever one goes; and it is certain, that whatever detriment the continuation and strict execution of the Molasses Act will bring to the trade of *North America* (and surely more or less it will bring), it will soon come home to *Great Britain;* and then the *British* Merchants will see their imprudence in sitting still as unconcerned spectators, whilst the *West Indians* are confining the trade of this extensive and improving country within their own narrow and unextensible circle. For nothing is more plain, than that if the exports of *North America* are diminished (be it by one fourth, one third, or one half), her imports from *Great Britain* must be lessened in the same proportion. To apply this to a fact: last

[1] *Select Letters on the Trade and Government of America.* By Francis Bernard (London, 1764), 9–11.

year were imported into this Province 15,000 hogsheads of molasses, all of which, except less than 500, came from *Ports*, which are now *Foreign*. The value of this, at 1s. 4d. a gallon (which is a middling price as sold out of merchants storehouses) is 100,000 pounds sterling; to purchase which, fish and lumber of near the same value must be sent from hence. Now suppose this trade prohibited (for a duty of 50 *per cent.* amounts to a prohibition) the consequences must be, that this Province must import 100,000 pounds less of *British* goods; and there is an entire loss of 100,000 pounds (the fish and lumber coming from an inexhaustible store) worth of goods to the general *British* Empire, besides the loss of trade and decrease of shipping; and this annual, in one Province, and in one article of trade only. Is there not therefore just cause of alarm from the apprehensions of the probability or possibility of such consequences? If it should be proposed to try the experiment for two or three years only; first let it be considered, that the experiment itself, if it turns out as is expected, will cost *Great Britain* many hundred thousand pounds. But this is not all: if, after the experiment has been made, it should be thought proper to restore the *North Americans* to the freedom of this trade, is it certain that, after an interruption of two or three years, it can be recovered again? Is it not probable, that in the interim the *Foreign* Plantations may be supplied from other parts (viz. low-priced fish from the *French* fisheries, lumber from the East side of the *Mississippi;*) and when the *North Americans* have leave again to resort to the *Foreign* Ports, they may find them shut against them? When the sale of *French* Molasses to the *North Americans* is prohibited, may it not be the cause of procuring the *French* planters liberty to distil it themselves? And if this valuable trade, which takes from us what no other markets will receive, and returns to us what ultimately centers in *Great Britain*, should, by making experiments, be destroyed; would it not be the case of the man whose curiosity (or expectation of extraordinary present gain) killed the goose who laid him the golden eggs? Surely it is not an idle or groundless fear which makes thinking people dread the consequences of continuing and enforcing this Act.

G. *Grievances of the Colonists, 1764*[1]

Governor Pownall here sums up the obnoxious acts of the year 1764 of which the colonists were complaining so loudly. Pownall was one of the most liberal

[1] *The Administration of the British Colonies.* By Thomas Pownall (5th edition, London, 1774), I, 126–129.

administrators in the colonies, serving as governor of Massachusetts and of South Carolina, and as lieutenant governor of New Jersey. After his return to England he wrote and spoke in Parliament in defense of the colonies.

Upon the restoration of the monarchy, when many of the rights of the subject, and of the constitution, were settled; *the constitution of the colonies, received their great alteration:* the King participated the sovereignty of the colonies with the parliament; the parliament, in its proper capacity, was admitted to a share in the government of them: The parliament then first, taking up the idea, indeed very naturally, from the power they had exercised during the commonwealth; that all these, his Majesty's sovereign dominions, and "all these, his Majesty's subjects," were of or belonging to the realm; then first, in the proper capacity of legislature, (supreme legislature of the realm,) interposed in the regulation and governing of the colonies. — And thenceforward, from time to time, sundry acts of parliament were made, not only (1st) for regulating the trade of the colonies; but also (2dly) for ordering and limiting their internal rights, privileges and property; and even (3dly) for taxing them. — In the course of which events; while the Colonists considered this principle as the *Palladium* of their liberties, *viz.* that they were to be ruled and governed only by acts of parliament, together with their own laws not contrary to the laws of England; the King in the same course of events called in the aid of parliament, to enable him to regulate and govern the colonies. — The British merchants at times applied to parliament, on the affairs of the colonies: and even the *West India* Planters applied to the same power, to carry a measure against the colonies of North America. Hence we find enacted, in the course of those events,

I. The navigation act; the sugar, and other acts, for regulating and restraining the trade of the colonies.

II. Also Acts, 1. altering the nature of their estates, by treating real estates as chattels. 2. Restraining them from manufactures. 3. Regulating their money. 4. Altering the nature of evidence in the courts of common law; by making an affidavit of a debt before the Lord mayor in London, &c. certified in writing, an evidence in their courts in America. 5. Dissolving indentures; by discharging such of their servants as should enlist in the King's service.

III. Also Acts, fixing a tax upon American sailors, payable to the Greenwich Hospital. 2. Likewise imposing taxes; by the several duties payable on sundry goods, if intended as materials of trade, to be paid *within the province*, or colony, *before* they can be put on board, for exportation. 3. Also, the revenue arising from the *duties*

payable on the postage of letters. 4. Also, the tax of quartering soldiers, and supplying them in their quarters. Lastly, establishing the claim which Great Britain makes, of taxing the colonies in all cases whatsoever. by enacting the claim into a declared right, by act of parliament.

H. *Opposition to Acts of Trade, 1775* [1]

The essays from which this extract was taken were written by John Adams in answer to one by Leonard, in which the latter had defended the conduct of Great Britain toward the colonies. While some allowance must be made for the purpose for which the essay was written, it yet contains some very significant statements.

This writer says, acts of parliament for regulating our internal polity were familiar. This I deny. So far otherwise, that the hatter's act was never regarded; the act to destroy the Land Bank Scheme raised a greater ferment in this province, than the stamp-act did, which was appeased only by passing province laws directly in opposition to it. The act against slitting mills, and tilt hammers, never was executed here. As to the postage, it was so useful a regulation, so few persons paid it, and they found such a benefit by it, that little opposition was made to it. Yet every man who thought about it called it an usurpation. Duties for regulating trade we paid, because we thought it just and necessary that they should regulate the trade which their power protected. As for duties for a revenue, none were ever laid by parliament for that purpose until 1764, when, and ever since, its authority to do it has been constantly denied. Nor is this complacent writer near the truth, when he says, "We know that in all those acts of government, the good of the whole had been consulted." On the contrary, we know that the private interest of provincial governors and West India planters, had been consulted in the duties on foreign molasses, &c. and the private interest of a few Portugal merchants, in obliging us to touch at Falmouth with fruit, &c. in opposition to the good of the whole, and in many other instances.

I. *Testimony on the Stamp Act, 1765* [2]

A part of the scheme for colonial taxation had been a stamp act, which was approved by Parliament with very little opposition, the vote being 205 to 49 in the

[1] *Novanglus and Massachusettensis: or Political Essays, published in the years 1774 and 1775.*By John Adams and Jonathan Sewall [Daniel Leonard] (Boston, 1819), 39.

[2] Franklin, B., *Works* (Sparks edition, Boston, 1840), IV, 162–181, *passim.* Also in Hansard, *Parliamentary History of England*, XVI, 137–160.

House of Commons and unanimous in the House of Lords. In the colonies, however, where the stricter enforcement of the acts of trade were already threatening commerce with disaster, especially that carried on with the French and Spanish West Indies, the Stamp Act was vigorously resisted. To secure information as to the reasons for this attitude and as to general conditions in the colonies Parliament summoned Benjamin Franklin as a witness. The testimony he gave in this hearing is marked by tact and firmness and presents the colonial attitude very shrewdly. It made a deep impression upon Parliament. Some of the questions were evidently put by sympathizers with the colonies, for they invite answers favorable to their cause.

Q. What is your name, and place of abode?

A. Franklin, of Philadelphia.

Q. Do the Americans pay any considerable taxes among themselves?

A. Certainly many, and very heavy taxes.

Q. What are the present taxes in Pennsylvania, laid by the laws of the colony?

A. There are taxes on all estates, real and personal; a poll tax; a tax on all offices, professions, trades, and businesses, according to their profits; an excise on all wine, rum, and other spirits; and a duty, of ten pounds per head on all negroes imported, with some other duties.

Q. For what purposes are those taxes laid?

A. For the support of the civil and military establishments of the country, and to discharge the heavy debt contracted in the last war.

Q. How long are those taxes to continue?

A. Those for discharging the debt are to continue till 1772, and longer, if the debt should not be then all discharged. The others must always continue. . . .

Q. What may be the amount of one year's imports into Pennsylvania from Britain?

A. I have been informed that our merchants compute the imports from Britain to be above five hundred thousand pounds.

Q. What may be the amount of the produce of your province exported to Britain?

A. It must be small, as we produce little that is wanted in Britain. I suppose it cannot exceed forty thousand pounds.

Q. How then do you pay the balance?

A. The balance is paid by our produce carried to the West Indies, and sold in our own islands, or to the French, Spaniards, Danes, and Dutch; by the same produce carried to other colonies in North

America, as to New England, Nova Scotia, Newfoundland, Carolina, and Georgia; by the same, carried to different parts of Europe, as Spain, Portugal, and Italy. In all which places we receive either money, bills of exchange, or commodities that suit for remittance to Britain; which, together with all the profits on the industry of our merchants and mariners, arising in those circuitous voyages, and the freights made by their ships, center finally in Britain to discharge the balance, and pay for British manufactures continually used in the provinces, or sold to foreigners by our traders. . . .

Q. You have said that you pay heavy taxes in Pennsylvania; what do they amount to in the pound?

A. The tax on all estates, real and personal, is eighteen pence on the pound, fully rated; and the tax on the profits of trades and professions, with other taxes, do, I suppose, make full half a crown in the pound [*i.e.* a tax of 12½%, which would be very heavy. — Ed.] . . .

Q. Do you think the people in America would submit to pay the stamp duty, if it was moderated?

A. No, never, unless compelled by force of arms. . . .

Q. What was the temper of America towards Great Britain before the year 1763?

A. The best in the world. They submitted willingly to the government of the crown, and paid, in their courts, obedience to the acts of Parliament. . . .

Q. And what is their temper now?

A. O, very much altered.

Q. Did you ever hear the authority of Parliament to make laws for America questioned till lately?

A. The authority of Parliament was allowed to be valid in all laws, except such as should lay internal taxes. It was never disputed in laying duties to regulate commerce. . . .

Q. And have they not still the same respect for Parliament?

A. No, it is greatly lessened.

Q. To what cause is that owing?

A. To a concurrence of causes; the restraints lately laid on their trade, by which the bringing of foreign gold and silver into the colonies was prevented; the prohibition of making paper money among themselves, and then demanding a new and heavy tax by stamps, taking away, at the same time, trials by juries, and refusing to receive and hear their humble petitions.

Q. Don't you think they would submit to the Stamp Act, if it

was modified, the obnoxious parts taken out, and the duty reduced to some particulars of small moment?

A. No, they will never submit to it. . . .

Q. You say the colonies have always submitted to external taxes, and object to the right of Parliament only in laying internal taxes; now can you show, that there is any kind of difference between the two taxes to the colony on which they may be laid?

A. I think the difference is very great. An *external* tax is a duty laid on commodities imported; that duty is added to the first cost and other charges on the commodity, and, when it is offered to sale, makes a part of the price. If the people do not like it at that price, they refuse it; they are not obliged to pay it. But an *internal* tax is forced from the people without their consent, if not laid by their own representatives. The Stamp Act says, we shall have no commerce, make no exchange of property with each other, neither purchase, nor grant, nor recover debts; we shall neither marry nor make our wills, unless we pay such and such sums; and thus it is intended to extort our money from us, or ruin us by the consequences of refusing to pay it.

Q. But supposing the external tax or duty to be laid on the necessaries of life, imported into your colony, will not that be the same thing in its effects as an internal tax?

A. I do not know a single article imported into the northern colonies, but what they can either do with out, or make themselves.

Q. Don't you think cloth from England absolutely necessary to them?

A. No, by no means absolutely necessary; with industry and good management, they may very well supply themselves with all they want.

Q. Will it not take a long time to establish that manufacture among them; and must they not in the mean while suffer greatly?

A. I think not. They have made a surprising progress already. And I am of opinion, that before their old clothes are worn out, they will have new ones of their own making.

Q. Can they possibly find wool enough in North America?

A. They have taken steps to increase the wool. They entered into general combinations to eat no more lamb; and very few lambs were killed last year. This course, persisted in, will soon make a prodigious difference in the quantity of wool. And the establishing of great manufactories, like those in the clothing towns here, is not necessary, as it is where the business is to be carried on for the pur-

poses of trade. The people will all spin, and work for themselves, in their own houses. . . .

Q. If the act is not repealed, what do you think will be the consequences?

A. A total loss of the respect and affection the people of America bear to this country, and of all the commerce that depends on that respect and affection.

Q. How can the commerce be affected?

A. You will find, that if the act is not repealed, they will take a very little of your manufactures in a short time.

Q. Is it in their power to do without them?

A. I think they may very well do without them.

Q. Is it their interest not to take them?

A. The goods they take from Britain are either necessaries, mere conveniences, or superfluities. The first, as cloth, &c., with a little industry they can make at home; the second they can do without, till they are able to provide them among themselves; and the last, which are much the greatest part, they will strike off immediately. They are mere articles of fashion, purchased and consumed because the fashion in a respected country; but will now be detested and rejected. The people have already struck off, by general agreement, the use of all goods fashionable in mournings, and many thousand pounds' worth are sent back as unsalable. . . .

Q. You say they do not object to the right of Parliament, in laying duties on goods to be paid on their importation; now, is there any kind of difference between a duty on the importation of goods, and an excise on their consumption?

A. Yes, a very material one; an excise, for the reasons I have just mentioned, they think you can have no right to lay within their country. But the sea is yours; you maintain, by your fleets, the safety of navigation in it, and keep it clear of pirates; you may have, therefore, a natural and equitable right to some toll or duty on merchandises carried through that part of your dominions, towards defraying the expense you are at in ships to maintain the safety of that carriage.

J. *Causes of American Discontent before 1768* [1]

In the following extract Franklin puts his finger upon a weak point in the colonial system, namely the ease with which interested parties or private interests could secure favorable legislation directed against the colonies. Acts which might

[1] Franklin, B., *Works* (Sparks edition, Boston, 1840), IV, 249–52.

have been borne without a murmur, if clearly in the interest of the Empire, took on a very different aspect when they were seen to favor only a few individuals. There were enough of these to discredit the whole system in the eyes of the colonists.

The colonists thus being greatly alarmed, as I said before, by the news of the act for abolishing the legislature of New York, and the imposition of these new duties, professedly for such disagreeable purposes, (accompanied by a new set of revenue officers, with large appointments, which gave strong suspicions that more business of the same kind was soon to be provided for them, that they might earn their salaries,) began seriously to consider their situation; and to revolve afresh in their minds grievances, which, from their respect and love for this country, they had long borne, and seemed almost willing to forget.

They reflected how lightly the interest of all America had been estimated here, when the interests of a few of the inhabitants of Great Britain happened to have the smallest competition with it. That the whole American people was forbidden the advantage of a direct importation of wine, oil, and fruit, from Portugal, but must take them loaded with all the expense of a voyage one thousand leagues round about, being to be landed first in England, to be re-shipped for America; expenses amounting, in war time at least, to thirty pounds per cent more than otherwise they would have been charged with; and all this, merely that a few Portugal merchants in London may gain a commission on those goods passing through their hands, (Portugal merchants, by the by, that can complain loudly of the smallest hardships laid on their trade by foreigners, and yet, even in the last year, could oppose with all their influence the giving ease to their fellow subjects labouring under so heavy an oppression!) That, on a slight complaint of a few Virginia merchants, nine colonies had been restrained from making paper money, become absolutely necessary to their internal commerce, from the constant remittance of their gold and silver to Britain.

But not only the interests of a particular body of merchants, but the interests of any small body of British tradesmen or artificers, has been found, they say, to outweigh that of all the King's subjects in the colonies. There cannot be a stronger natural right than that of a man's making the best profit he can of the natural produce of his lands, provided he does not thereby hurt the state in general. Iron is to be found everywhere in America, and the beaver furs are the natural produce of that country. Hats, and nails, and steel are wanted there as well as here. It is of no importance to the common

welfare of the empire, whether a subject of the King's obtains his living by making hats on this or that side of the water. Yet the hatters of England have prevailed to obtain an act in their own favor, restraining that manufacture in America; in order to oblige the Americans to send their beaver to England to be manufactured, and purchase back the hats, loaded with the charges of a double transportation. In the same manner have a few nail-makers, and a still smaller body of steel-makers (perhaps there are not half a dozen of these in England), prevailed totally to forbid by an act of Parliament the erecting of slitting-mills, or steel furnaces in America; that the Americans may be obliged to take all their nails for their buildings, and steel for their tools, from these artificers, under the same disadvantages.

Added to these, the Americans remembered the act authorizing the most cruel insult that perhaps was ever offered by one people to another, that of *emptying our gaols* into their settlements; Scotland too having within these two years obtained the privilege it had not before, of sending its rogues and villains also to the plantations.

K. *Opposition to Tax on Tea due to Smugglers, 1770* [1]

John Adams was living in Boston at the time of the destruction of the tea in Boston harbor and was in intimate touch with the leading men in the movements leading to the Revolution. As the extract is taken from his private diary we may assume his comment is sincere.

Stephens, the Connecticut hemp man, was at my office, with Mr. Counsellor Powell and Mr. Kent. Stephens says, that the whole colony of Connecticut has given more implicit observance to a letter from the selectmen of Boston than to their Bibles for some years; and that, in consequence of it, the country is vastly happier than it was; for every family has become a little manufactory-house, and they raise and make within themselves many things for which they used to run in debt to the merchants and traders. So that nobody is hurt but Boston and the maritime towns.

"I wish there was a tax of five shillings sterling on every button from England. It would be vastly for the good of this country, &c. As to all the bustle and bombast about tea, it has been begun by about half a dozen Holland tea-smugglers, who could not find so much profit in their trade since the ninepence was taken off in England." Thus he. Some sense and some nonsense!

[1] *Diary*, in Works. By John Adams. Edited by C. F. Adams (Boston, 1850), II, 237.

L. *A Defence of the Navigation Acts, 1769* [1]

A vigorous defense of the navigation acts and of the English colonial policy was made by Sir George Grenville, the chancellor of the exchequer during this period, under whose direction the execution of these acts was carried out. It is an extreme presentation of the English point of view, making it appear that all the acts were passed primarily for the sake of the colonies and that the Seven Years' War was "undertaken for their defense only."

But of all the Measures which were pursued for the Benefit of Trade, those were by far the most important which respected the Colonies, who have been of late the Darling Object of their Mother Country's Care: We are not yet recovered from a War undertaken solely for their Protection: Every Object for which it was begun, is accomplished; and still greater are obtained than at first were even thought of; but whatever may be the Value of the Acquisitions in *America*, the immediate Benefit of them is to the Colonies; and this Country feels it only in their Prosperity; for though the Accessions of Trade and Territory which were obtained by the Peace, are so many Additions to the Empire and the Commerce of *Great Britain* at large, yet they principally affect that Part of her Dominions, and that Branch of her Trade, to which they immediately relate. To improve these Advantages, and to forward still further the peculiar Interests of Colonies, was the chief Aim of the Administration in the Period now before me. Their Whale-Fishery was encouraged by taking off the heavy Duty under which it laboured; in consequence of which Gratuity it must now soon entirely overpower our own, and will probably rival that of the *Dutch;* so as to supply not only the whole Demand of this Country, but Part also of the foreign Consumption. The Restraint laid by the Acts of Navigation upon the Exportation of Rice, was at the same Time relaxed, and Liberty given to both the *Carolinas* and to *Georgia*, to carry it to foreign Plantations where large Cargoes may be annually disposed of. The Culture of Hemp and Flax in *America* was promoted by Bounties; and another Bounty was given upon the native wild Produce of the Continent; the Timber, in such Proportions in the several Species of it, as will enable the Colonists to bring vast Quantities hither. Should the Ends intended by all this Liberality be answered, and the Effect be, as in time it probably will be, that the foreign Plantations will be supplied wholly with Rice, and this Island in a great Measure with Whale Bone and

[1] *Considerations on the Trade and Finances of this Kingdom.* By George Grenville [?] (London, 1769), 61–3.

Oil, with Hemp, Flax, and Timber, from the Colonies, the Encrease of their Trade will exceed the most sanguine Expectations: The Consumption of these Commodities which they may be able to furnish cannot be estimated at less than a Million a Year: In all they will undoubtedly have a Preference, and in some a Monopoly.

At the same Time that new Branches of Commerce were thus given to them, others which they had before were improved. The Prohibition on the Exportation of *American* Bar Iron from this Kingdom was taken away by an Act passed in 1765 . . . and a still further Preference was shewn to the Produce of our *West-India* Colonies, by laying heavy Impositions upon the Indigo, Coffee, Sugar, and Melasses of the foreign Islands imported into *North America*, while the same Commodities raised in our own, were lightly charged at the most, and some of them entirely free. . . .

Whatever may be the Effects of the Attention thus shewn to the Colonies, the Benefit will be partially felt here, but principally there: To them the Whole is gain; we on the contrary in many Respects sustain a Loss; and if the Interests of the Mother Country could be distinguished from those of the Colonies, it would be difficult to justify the Expence she has thereby incurred; for out of her Revenues, the Bounties upon Hemp, Flax, and Timber must be paid; and on so much of the *British* Consumption as shall in consequence of this Encouragement be supplied from *America*, there will be a further Loss of the Duties upon foreign Hemp, Flax, and Timber now imported here: The Duty too upon Whale-Fins must be taken into the Account which is another Deduction, avowedly made with a view to give their Fishery a Preference even to our own; and it is obvious that the Amount of the Whole, though it cannot easily be estimated, must be very considerable.

Were there no other Ground to require a Revenue from the Colonies, than as a Return from these Obligations, it would alone be a sufficient Foundation: Add to these the Advantages obtained for them by the Peace; and the Debt incurred by a War undertaken for their Defence only; the Distress thereby brought upon the Finances, upon the Credit, both public and private, upon the Trade, and upon the People of this Country; and it must be acknowledged that no Time was ever so seasonable for claiming their Assistance. The Distribution is too unequal, of Benefits only to the Colonies and of all the Burthens upon the Mother Country; and yet no more was desired, than that they should contribute to the Preservation of the Advantages they had Received, and take upon themselves a small share of the Establish-

ment necessary for their own Protection: Upon these Principles several new Taxes were laid upon the Colonies: Many of them were indeed, as I have already shewn, rather Regulations of Trade than Funds of Revenue: But some were intended to answer both Purposes: In others the Produce was the Principal Object; and yet even the most productive of all, were of that Kind which is perhaps more tender of Trade than any other: The same Sum could not have been raised with so little Oppression by Impost as by Stamp Duties,[1] for they do not even effect some Articles of Commerce more than others; they do not even fall upon Men of any particular Denomination: They are heavy upon none because they are paid only occasionally; and they are collected with more Ease to the Subject than any; but a distinction between internal and external Taxes was set up in *America*, and Occasion was from thence taken to raise Disturbances there, the Particulars and Consequences of which are of such public Notoriety, that it is needless to mention them: . . .

M. *Causes of the Revolution, 1776*[2]

Dean Tucker wrote with considerable force, not to say acerbity, against the demands of the colonists. In the extract here quoted he inquires what the real grievances were that led to the outcry at the time of the Stamp Act, and concludes in no very friendly tone that they were due to the English interference with smuggling, and with the illegal issue of paper money, and to a desire to secure political independence. Tucker was Dean of Gloucester, and a violent and able partisan.

Upon the Whole therefore, what is the Cause of such an amazing Outcry as you raise at present? — Not the Stamp Duty itself; all the World are agreed on that Head; and none can be so ignorant, or so stupid, as not to see, that this is a mere Sham and Pretence. What then are the real Grievances, seeing that the Things which you alledge are only the pretended ones? Why, some of you are exasperated against the Mother Country, on account of the Revival of certain Restrictions laid upon their Trade: — I say, a *Revival;* for the same Restriction have been the standing Rules of Government from the Beginning; though not enforced at all Times with equal Strictness. During the late War, you *Americans* could not import the Manufactures of other Nations (which it is your constant Aim to do, and

[1] It is impossible to speak with Certainty of the Produce of any of the *American* Taxes. I have therefore throughout followed the usual Calculation, and estimated the Impost Duties at 60,000 l. and the Stamp Duties at 100,000 *l. per ann.*

[2] *Four Tracts on Political and Commercial Subjects.* By Josiah Tucker (Gloucester, 1776), 132–4, 136–7.

the Mother Country always to prevent) so conveniently as you can in Times of Peace; and therefore, there was no Need of watching you so narrowly, as far as that Branch of Trade was concerned. But immediately upon the Peace, the various Manufactures of *Europe*, particularly those of *France*, which could not find Vent before, were spread, as it were, over all your Colonies, to the prodigious Detriment of your Mother Country; and therefore our late Set of Ministers acted certainly right, in putting in Force the Laws of their Country, in order to check this growing Evil. If in so doing they committed any Error; or, if the Persons to whom the Execution of these Laws were intrusted, exceeded their Instructions; there is no Doubt to be made, but that all this will be rectified by the present Administration. And having done that, they will have done all that in Reason you can expect from them. But alas! the Expectations of an *American* carry him much further: For he will ever complain and smuggle, and smuggle and complain, 'till all Restraints are removed, and 'till he can both buy and sell, whenever, and wheresoever he pleases. Anything short of this, is still a Grievance, a Badge of Slavery, an Usurpation on the natural Rights and Liberties of a free People, and I know not how many bad Things besides.

But, my good Friend, be assured, that these are Restraints, which neither the present, nor any future Ministry can exempt you from. They are the standing Laws of the Kingdom; and God forbid, that we should allow that dispensing Power to our Ministers, which we so justly deny to our Kings. In short while you are a Colony, you must be subordinate to the Mother Country. These are the Terms and Conditions, on which you were permitted to make your first Settlements: They are the Terms and Conditions on which you alone can be entitled to the Assistance and Protection of *Great-Britain;* — . . .

So much as to your first Grievance; and as to your second it is, beyond Doubt, of a Nature still worse. For many among you are sorely concerned, That they cannot pay their *British* Debts with an *American* Sponge. This is an intolerable Grievance, and they long for the day when they shall be freed from this galling Chain. Our Merchants in *London*, *Bristol*, *Liverpool*, *Glasgow*, *&c. &c.* perfectly understand *your* many Hints and Inuendoes to us, on this Head. But indeed, lest we should be so dull as not to comprehend your Meaning, you have spoken out, and proposed on open Association against paying your just Debts. Had *our* Debtors in any other Part of the Globe, had the *French* or *Spaniards* proposed the like (and surely they have all at least an equal Right) what Name would you have given to such

Proceedings? But I forget: You are not the faithless *French* or *Spaniards:* You are ourselves: You are honest *Englishmen.*

Your third Grievance is the Sovereignty of *Great-Britain;* For you want to be independent: You wish to be an Empire by itself, and to be no longer the Province of another. This Spirit is uppermost; and this Principle is visible in all your Speeches, and all your Writings, even when you take some Pains to disguise it. — "What! an Island! A Spot such as this to command the great and mighty Continent of *North-America!* Preposterous! A Continent, whose Inhabitants double every five and twenty Years! Who, therefore, within a Century and a Half will be upwards of an hundred and twenty Millions of Souls! — Forbid it Patriotism, forbid it Politics, that such a great and mighty Empire as this, should be held in Subjection by the paltry Kingdom of *Great-Britain!* Rather let the Seat of Empire be transferred; and let it be fixt, where it ought to be, *viz.* in *Great America!*"

II. Non-importation as a Means of Pressure

A. *Unfavorable Balance of Trade of the Northern American Colonies, 1700–1773* [1]

The following table, compiled by Lord Sheffield, shows clearly one of the reasons for the discontent aroused in New England by the stricter enforcement of the navigation acts. The northern colonies, many of whose products were denied access to English markets, had been compelled to develop a trade with the West Indies, with southern Europe, and to a small extent with Africa. With the profits from this trade they had been able to purchase English manufactures. How great this commerce was may be judged from this table, where the excess of exports in the northern colonies alone is given as £30,000,000 for the period 1700 to 1773. When this trade was interrupted by the enforcement of the navigation acts, and especially when the trade to the West Indies was cut off, the northern colonies were deprived of the means of purchasing English manufactured goods.

None of the colonies to the north of Maryland have ever had a balance in their favour by their imports from and exports to Great Britain; but on the contrary, a large balance against them, which they had no means of discharging but by a foreign and circuitous [2] commerce. By this commerce (except the value of the ships built for

[1] *Observations on the Commerce of the American States.* By Lord John Sheffield (2d edition, London, 1784), 246–7.

[2] Whatever diminution there may be of their circuitous trade, we shall gain, and with the benefit of freight, all the profit connected with a more extensive navigation.

the British merchants, the amount of which cannot possibly be ascertained) they must, since the year 1700, have obtained from other countries, and remitted to this, upwards of thirty millions sterling in payment for goods taken from hence, over and above the amount of all their own produce and fisheries remitted directly.[1] By foreign is meant the trade to the West Indies, Africa, and all parts of Europe, except Great Britain.

Balance or excess of exports to, and of imports from, the American States from 1700 to 1773:

	Excess of Exports			Excess of Imports		
	£	s.	d.			
The four New England States.....	13,896,287	17	4¼			
New York, New Jersey, and Pennsylvania, including Delaware counties.....	16,941,281	9	4¾			
	30,837,569	6	9	£	s.	d.
Virginia and Maryland.....				8,155,363	11	5½
North and South Carolina.....				2,611,671	13	10
Georgia.....	123,034	9	7			
Excess of exports to the provinces north of Maryland.....	30,960,603	16	4	10,767,035	5	3½
Balance or excess of exports to America over the excess of imports				20,193,568	11	½

B. *Non-importation Agreements in Boston and New York, 1768*[2]

In order to protest against the Stamp Act the merchants of Massachusetts, Rhode Island, New York, and Pennsylvania in 1765 united in a non-importation agreement, by which they bound themselves not to import British goods. Because of the loss of trade British merchants petitioned Parliament to repeal the Stamp Act,

[1] There should be added to the value of exports to America, between 2 and 300,000 l. sent to Africa annually for the purchase of slaves, which were chiefly imported by our merchants into the revolted provinces. The real exports of England, then, to those provinces would be 1,531,206 l. instead of 1,331,206 l., the average annual export of ten years to the American States, as in the annexed Tables, and as the whole imports from those states into England were only valued at 743,560 l., they must have been bad paymasters indeed, or have had as much foreign and circuitous trade for their exports as they had directly with Great Britain, to be enabled to pay 20 s. in the pound.

[2] *An Historical and Chronological Deduction of the Origin of Commerce.* By Adam Anderson (London, 1789), IV, 118–119.

which was done. Again in 1768 the same method of boycott was employed, with equally successful results. The following extract states briefly the agreement made by Boston merchants.

From the voluminous miscellany of public writings, which the colony transactions of the present year produced, we shall only select the following agreements entered into by the inhabitants of Boston and New York.

"The merchants and traders in the town of Boston, having taken into consideration the deplorable situation of the trade, and the many difficulties it at present labours under, on account of the scarcity of money, which is daily increasing for want of the other remittances to discharge our debts in Great Britain, and the large sums collected by the officers of the Customs for duties on goods imported; the heavy taxes levied to discharge the debts contracted by the Government in the late war; the embarrassments and restrictions laid on the trade by the several late acts of Parliament; together with the bad success of our cod fishery this season, and the discouraging prospect of the whale fishery, by which our principal sources of remittances are like to be greatly diminished, and we, thereby, rendered unable to pay the debts we owe the merchants in Great Britain, and to continue the importation of goods from thence.

"We, the subscribers, in order to relieve the trade, under those discouragements, to promote industry, frugality, and economy, and to discourage luxury, and every kind of extravagance, do promise and engage to and with each other as follows:

"First, That we will not send for or import from Great Britain, either upon our own account, or upon commission, this fall, any other goods than what are already ordered for the fall supply.

"Secondly, That we will not send for or import any kind of goods or merchandize from Great Britain, either on our own account, or on commissions, or any otherwise, from January 1, 1769, to January 1, 1770, except salt, coals, fish-hooks and lines, hamp and duck bar lead and shot, wool cards and wool wire.

"Thirdly, That we will not purchase of any factor or others, any kind of goods imported from Great Britain from January 1, 1769, to January 1, 1770.

"Fourthly, That we will not import, on our own account, or on commissions, or purchase of any who shall import from any other colony in America, from January 1769 to January 1770, any tea, glass, paper, or other goods, commonly imported from Great Britain.

"Fifthly, That we will not, from and after the first of January 1769, import into this province any tea, paper, glass, or painter's colours, until the act imposing duties on those articles shall be repealed.

"In witness whereof, &c." — Dated August 1, 1768.

On the 15th of September following, the inhabitants of New York, incited, according to their own declaration, by the example of those of Boston, entered into a similar agreement for the non-use, and non-importation of British produce and manufactures.

C. *Effect in England of Stamp Act, 1765*[1]

The value of the policy of non-importation by the colonies in order to exert pressure upon Parliament through English merchants is well illustrated by Adam Smith's comment. This "nation of shop-keepers," as he called them in another place, preferred profits to principles.

. . . The expectation of a rupture with the colonies, accordingly, has struck the people of Great Britain with more terror than they ever felt for a Spanish armada, or a French invasion. It was this terror, whether well or ill grounded, which rendered the repeal of the stamp act, among the merchants at least, a popular measure. In the total exclusion from the colony market, was it to last only for a few years, the greater part of our merchants used to fancy that they foresaw an entire stop to their trade; the greater part of our master manufacturers, the entire ruin of their business; and the greater part of our workmen, an end of their employment. A rupture with any of our neighbours upon the continent, though likely too to occasion some stop or interruption in the employments of some of all these different orders of people, is foreseen, however, without any such general emotion. . . .

D. *Non-importation in North Carolina, 1774*[2]

The closure of the port of Boston in 1774 aroused the other colonies, and a third non-importation association was agreed to by the Continental Congress, to go into effect on December 1. The following resolutions from North Carolina, passed a month before the Continental Congress voted to approve of such action, shows the unanimity of feeling which characterized the colonies by this time.

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[1] *An Inquiry into the Nature and Causes of the Wealth of Nations*. By Adam Smith (Edinburgh, 1776). Edited by Edwin Cannan (London, 1904), II, 105–6.

[2] *The Colonial Records of North Carolina* (Raleigh, 1886), IX, 1024–6. For proceedings of the Safety Committees, showing how the agreement was enforced, see *ibid.*, IX, 1101, 1103, 1107 ff.

Proceedings of the Freeholders in Rowan County.

August 8th 1774.

At a meeting August 8th 1774, The following resolves were unanimously agreed to. . . .

Resolved, That the Right to impose Taxes or Duties to be paid by the Inhabitants within this Province for any purpose whatsoever is peculiar and essential to the General Assembly in whom the legislative Authority of the Colony is vested. . . .

Resolved, That a general Association between all the American Colonies, not to import from Great Britain any Commodity whatsoever (except such things as shall be hereafter excepted by the General Congress of this Province) ought to be entered into and not dissolved until the just Rights of the said Colonies are restored to them, and the cruel Acts of the British Parliament against the Massachusetts Bay and Town of Boston are repealed.

Resolved, That no friend to the Rights and Liberties of America ought to purchase any Commodity whatsoever, except such as shall be excepted, which shall be imported from Great Britain after the general Association shall be agreed upon.

Resolved, That every kind of Luxury, Dissipation, and Extravagance ought to be banished from among us.

Resolved, That manufactures ought to be encouraged by opening Subscriptions for that purpose, or by any other proper means.

Resolved, That the African Trade is injurious to this Colony, obstructs the Population of it by freemen, prevents manufactures, and other Useful Emigrants from Europe from settling among us, and occasions an annual increase of the Balance of Trade against the Colonies.

Resolved, That the raising of Sheep, Hemp and Flax ought to be encouraged.

Resolved, That to be cloathed in manufactures fabricated in the Colonies ought to be considered as a Badge and Distinction of Respect and true Patriotism.

E. *Petition of London Merchants for Reconciliation, 1775* [1]

The success of the policy of non-importation by the colonists, through the pressure they exerted upon British merchants, is well illustrated by this petition of London merchants to the House of Commons to apply "healing remedies" to the interrupted trade between the two countries.

[1] *Parliamentary History of England.* By Hansard (London, 1813), XVIII, 168–179.

Debate in the Commons on the Petitions of the Merchants of London and Bristol for Reconciliation with America. Jan. 23. Mr. Alderman *Hayley* said he had a petition from the merchants of the city of London concerned in the commerce to North-America, to that honourable House, and desired leave to present the same, which being given, it was brought up and read, setting forth;

"That the petitioners are all essentially interested in the trade to North-America, either as exporters and importers, or as venders of British and foreign goods for exportation to that country; and that the petitioners have exported, or sold for exportation, to the British colonies in North-America, very large quantities of the manufacture of Great Britain and Ireland, and in particular the staple articles of woollen, iron, and linen, also those of cotton, silk, leather, pewter, tin, copper, and brass, with almost every British manufacture; also large quantities of foreign linens and other articles imported into these kingdoms, from Flanders, Holland, Germany, the East Countries, Portugal, Spain, and Italy, which are generally received from those countries in return for British manufactures; and that the petitioners have likewise exported, or sold for exportation, great quantities of the various species of goods imported into this kingdom from the East-Indies, part of which receive additional manufacture in Great Britain; and that the petitioners receive returns from North America to this kingdom directly, viz. pig and bar iron, timber, staves, naval stores, tobacco, rice, indigo, deer and other skins, beaver and furs, train oil, whalebone, bees wax, pot and pearl ashes, drugs, and dying woods, with some bullion, and also wheat flour, Indian corn and salted provisions, when, on account of scarcity in Great Britain, those articles are permitted to be imported; and that the petitioners receive returns circuitously from Ireland (for flax seed, &c. exported from North America) by bills of exchange on the merchants of this city trading to Ireland, for the proceeds of linens, &c. imported into these kingdoms from the West Indies; in return for provisions, lumber and cattle, exported from North America, for the use and support of the West India islands, by bills of exchange on the West India merchants, for the proceeds of sugar, molasses, rum, cotton, coffee, or other produce, imported from those islands into these kingdoms; from Italy, Spain, Portugal, France, Flanders, Germany, Holland, and the East Countries, by bills of exchange or bullion in return for wheat flour, rice, Indian corn, fish, and lumber exported from the British colonies in North America, for the use of those countries; and that the petitioners have great reason to believe, from the best informations they can

obtain, that on the balance of this extensive commerce, there is now due from the colonies in North America to the said city only, 2,000,000*l.* sterling, and upwards; and that, by the direct commerce with the colonies, and the circuitous trade thereon depending, some thousands of ships and vessels are employed, and many thousands of seamen are bred and maintained, thereby encreasing the naval strength and power of Great Britain; and that in the year 1765, there was a great stagnation of the commerce between Great Britain and her colonies, in consequence of an Act for granting and applying certain stamp-duties and other duties, in the British colonies and plantations in America, by which the merchants trading to North America, and the artificers employed in the various manufactures consumed in those countries, were subjected to many hardships; and that, in the following year, the said Act was repealed, under an express declaration of the legislature, that the continuance of the said Act would be attended with many inconveniences and might be productive of consequences greatly detrimental to the commercial interests of these kingdoms; upon which repeal, the trade to the British colonies immediately resumed its former flourishing state; and that in the year 1767, an Act passed for granting certain duties in the British colonies and plantations in America, which imposed certain duties, to be paid in America, on tea, glass, red and white lead, painters' colours, paper, paste-board, mill-board, and scale-board, when the commerce with the colonies was again interrupted; and that in the year 1770, such parts of the said Act as imposed duties on glass, red and white lead, painters' colours, paper, paste-board, mill-board, and scale-board, were repealed, when the trade to America soon revived, excepting the article of tea, on which a duty was continued, to be demanded on its importation into America, whereby that branch of our commerce was nearly lost; and that, in the year 1773, an Act passed to allow a drawback of the duties of customs on the exportation of tea to his Majesty's colonies or plantations in America, and to empower the commissioners of the Treasury to grant licenses to the East India Company to export tea, duty free; and by the operations of those and other laws, the minds of his Majesty's subjects in the British colonies have been greatly disquieted, a total stop is now put to the export trade with the greatest and the most important part of North America, the public revenue is threatened with a large and fatal diminution, the petitioners with grievous distress, and thousands of industrious artificers and manufacturers with utter ruin; under these alarming circumstances, the petitioners receive no small comfort, from a per-

suasion that the representatives of the people, newly delegated to the most important of all trusts, will take the whole of these weighty matters into their most serious consideration; and therefore praying the House, that they will enter into a full and immediate examination of that system of commercial policy which was formerly adopted, and uniformly maintained to the happiness, and advantage of both countries, and will apply such healing remedies as can alone restore and establish the commerce between Great Britain and her colonies on a permanent foundation; and that the petitioners may be heard by themselves, or agents, in support of the said petition."

F. *Petition of West India Planters for Reconciliation, 1775* [1]

The effects of the non-importation agreements of the colonists were felt not only by London merchants, but also by West India planters, who were deprived at the same time of needed supplies and of a market for their products. They also brought pressure to bear upon Parliament to repeal the obnoxious legislation which had led to this situation.

Petition of the West India Planters to the Commons respecting the American Non-Importation Agreement. Feb. 2 [1775]. A Petition of the planters of his Majesty's sugar colonies residing in Great Britain, and of the merchants of London trading to the said colonies, was presented to the House, and read; setting forth,

"That the petitioners are exceedingly alarmed at an Agreement and Association entered into, by the Congress held at Philadelphia in North America, on the 5th of Sept. 1774, whereby the members thereof agreed and associated, for themselves and the inhabitants of the several provinces lying between Nova Scotia and Georgia, that from and after the 1st of Sept. 1774, they would not import into British America any melasses, syrups, paneles, coffee, or piemento, from the British plantations; and that after the 10th of Sept. 1775, if the Acts and the parts of the Acts of the British parliament therein mentioned, are not repealed, they would not directly, or indirectly, import any merchandize or commodity whatsoever to the West Indies; and representing to the House that the British property in the West India islands amounts to upwards of 30 millions sterling; and that a further property of many millions is employed in the commerce created by the said islands, a commerce comprehending Africa, the East Indies and Europe; and that the whole profits and produce of these

[1] *Parliamentary History of England.* By Hansard (London, 1813), XVIII, 219–221.

capitals ultimately center in Great Britain, and add to the national wealth, while the navigation necessary to all its branches, establishes a strength which wealth can neither purchase nor balance; and that the sugar plantations in the West Indies are subject to a greater variety of contingencies than many other species of property, from their necessary dependence on external support; and that therefore, should any interruption happen in the general system of their commerce, the great national stock thus vested and employed must become unprofitable and precarious; and that the profits arising from the present state of the said islands, and that are likely to arise from their future improvement, in a great measure depend on a free and reciprocal intercourse between them and the several provinces of North America, from whence they are furnished with provisions and other supplies absolutely necessary for their support and the maintenance of their plantations; and that the scarcity and high price, in Great Britain and other parts of Europe, of those articles of indispensible necessity which they now derive from the middle colonies of America, and the inadequate population in some parts of that continent, with the distance, danger, and uncertainty, of the navigation from others, forbid the petitioners to hope for a supply in any degree proportionate to their wants; and that, if the first part of the said Agreement and Association for a non-importation hath taken place, and shall be continued, the same will be highly detrimental to the sugar colonies; and that, if the second part of the said Agreement and Association for a non-exportation shall be carried into execution, which the petitioners do firmly believe will happen, unless the harmony that subsisted a few years ago between this kingdom and the provinces of America, to the infinite advantage of both, be restored, the islands, which are supplied with most of their subsistence from thence, will be reduced to the utmost distress, and the trade between all the islands and this kingdom will of course be obstructed, to the diminution of the public revenue, to the extreme injury of a great number of planters, and to the great prejudice of the merchants, not only by the said obstruction, but also by the delay of payment of the principal and interest of an immense debt due from the former to the latter; and therefore praying the House, to take into their most serious consideration that great political system of the colonies heretofore so very beneficial to the mother country and her dependencies, and adopt such measures as to them shall seem meet, to prevent the evils with which the petitioners are threatened, and to preserve the intercourse between the West India islands and the northern colonies, to the

general harmony and lasting benefit of the whole British empire; and that they may be heard, by themselves, their agents, or counsel, in support of their Petition."

Ordered to be referred to the consideration of the committee on the Petition of the merchants of London, concerned in the commerce of North America.

III. Continental Paper Money

A. *Continental Paper Money, 1775–1780* [1]

When the Revolution began the Continental Congress had no authority to levy taxes, nor power to borrow money by issuing bonds. It was therefore compelled to resort to the issue of paper money as practically the only financial resource at their command. Under the pressure of their necessities, however, they issued too much, and as soon as it was overissued it began to depreciate, until finally it became worthless and was ultimately repudiated. A defense by Franklin of the use of this continental currency is here given.

Much conversation having arisen lately on the subject of this money, and few persons being well acquainted with the nature of it, you may possibly oblige many of your readers by the following account of it.

When Great Britain commenced the present war upon the colonies, they had neither arms nor ammunition, nor money to purchase them or to pay soldiers. The new government had not immediately the consistence necessary for collecting heavy taxes; nor would taxes that could be raised within the year during peace, have been sufficient for a year's expense in time of war; they therefore printed a quantity of paper bills, each expressing to be of the value of a certain number of Spanish dollars, from one to thirty; with these they paid, clothed, and fed their troops, fitted out ships, and supported the war during five years against one of the most powerful nations of Europe.

The paper thus issued, passed current in all the internal commerce of the United States at par with silver during the first year; supplying the place of the gold and silver formerly current, but which was sent out of the country to purchase arms, &c., or to defray expenses of the army in Canada; but the great number of troops necessary to be kept on foot to defend a coast of near five hundred leagues in length, from an enemy, who, being masters at sea, could land troops where

[1] *Of the Paper Money of the United States of America.* By Benjamin Franklin. In Works (Sparks edition, Boston, 1840), II, 421–4.

they pleased, occasioned such a demand for money, and such frequent additional emissions of new bills, that the quantity became much greater than was wanted for the purposes of commerce; and, the commerce being diminished by the war, the surplus quantity of cash was by that means also proportionately augmented.

It has been long and often observed, that when the current money of a country is augmented beyond the occasions for money, as a medium of commerce, its value as money diminishes. . . .

. . . Paper money not being easily received out of the country that makes it, if the quantity becomes excessive, the depreciation is quicker and greater.

Thus the excessive quantities which necessity obliged the Americans to issue for continuing the war, occasioned a depreciation of value, which, commencing towards the end of 1776, has gone on augmenting, till at the beginning of the present year, fifty, sixty, and as far as seventy dollars in paper were reckoned not more than equal to one dollar in silver, and the prices of all things rose in proportion. . . .

The general effect of the depreciation among the inhabitants of the States has been this, that it has operated as a *gradual tax* upon them, their business has been done and paid for by the paper money, and every man has paid his share of the tax according to the time he retained any of the money in his hands, and to the depreciation within that time. Thus it has proved a tax on money, a kind of property very difficult to be taxed in any other mode; and it has fallen more equally than many other taxes, as those people paid most, who, being richest, had most money passing through their hands.

B. *Depreciation of Continental Paper Money, 1775–1779* [1]

The following table of depreciation by Thomas Jefferson shows that the depreciation did not begin until the year 1777, and after $14,000,000 had been issued. After that, however, it went on rapidly as a result of the great overissue by Congress, until the last emission brought in only 2½ cents for every $1.00 issued.

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[1] Quoted in *Historical Sketches of American Paper Currency*, Second Series. By Henry Phillips (Roxbury, 1866), 199.

DEPRECIATION OF THE CONTINENTAL CURRENCY

Jefferson's Table of Emissions

Emissions	Sum Emitted	Depreciation	Worth of the Sum Emitted in Silver Dollars
1775, June 23	$ 2,000,000	.....	$2,000,000
Nov. 29	3,000,000	.....	3,000,000
1776, Feb. 17	4,000,000	.....	4,000,000
Aug. 13	5,000,000	.....	5,000,000
1777, May 20	5,000,000	2, 2, 3	1,877,273
Aug. 15	1,000,000	3	333,333⅓
Nov. 7	1,000,000	4	250,000
Dec. 3	1,000,000	4	250,000
1778, Jan. 8	1,000,000	4	250,000
Jan. 22	2,000,000	4	500,000
Feb. 16	2,000,000	5	400,000
Mar. 5	2,000,000	5	400,000
April 4	1,000,000	6	166,666⅔
April 11	5,000,000	6	833,333⅓
April 18	500,000	6	83,333⅓
May 22	5,000,000	5	1,000,000
June 20	5,000,000	4	1,250,000
July 30	5,000,000	4½	1,111,111
Sept. 5	5,000,000	5	1,000,000
Sept. 26	10,000,100	5	2,000,020
Nov. 4	10,000,100	6	1,666,683⅓
Dec. 14	10,000,100	6	1,666,683⅓
1779, Jan. 14	24,447,620*	8	3,055,952½
Feb. 3	5,000,160	10	500,016
Feb. 12	5,000,160	10	500,016
April 2	5,000,160	17	294,127
May 5	10,000,100	24	416,670⅝
June 4	10,000,100	20	500,005
June 17	15,000,280	20	750,014
Sept. 17	15,000,260	24	625,010⅝
Oct. 14	5,000,180	30	166,672⅔
Nov. 17	10,050,540	38½	261,053
Nov. 29	10,000,140	38½	259,743
	$200,000,000		$36,367,719⅝

* The sum actually voted was $50,000,400, but part of it was for exchange of old bills, without saying how much. It is presumed that these exchanges absorbed $25,552,780, because $24,447,620 with all the other emissions preceding September 2, 1779, will amount to $159,948,880, the sum which Congress declared to be then in circulation.

C. *Effects of Continental Paper Money, 1775–1780* [1]

The economic and social effects of the depreciation of the continental paper money in South Carolina are here pictured. This may be accepted as typical of conditions in all the colonies during this period.

That the money should finally sink, or that it should be redeemed by a scale of depreciation, were events neither forseen nor expected by the bulk of the people. The Congress and the local Legislatures, for the first five years of the war, did not entertain the most distant idea of such a breach of public faith. The generality of the friends of the revolution, reposing unlimited confidence in the integrity of their rulers, the plighted faith of government, and the success of the cause of America, amused themselves with the idea that in a few years their paper dollars, under the influence of peace and independence, would be sunk by equal taxes or realized into silver at their nominal value; and that, therefore, the sellers would ultimately increase their estates in the same proportion that the currency had depreciated. The plunderings and devastations of the enemy made several think that their property would be much safer, when turned into money, than when subject to the casualties of war. The disposition to sell was in a great degree proportioned to the confidence in the justice and final success of the revolution, superadded to expectations of a speedy termination of the war. The most sanguine Whigs were, therefore, oftenest duped by the fallacious sound of high prices. These principles operated so extensively that the property of the inhabitants, in a considerable degree, changed its owners. Many opulent persons, of ancient families, were ruined by selling paternal estates for a depreciating paper currency, which, in a few weeks, would not replace half of the real property in exchange for which it was obtained. Many bold adventurers made fortunes in a short time by running in debt beyond their abilities. Prudence ceased to be a virtue, and rashness usurped its place. The warm friends of America, who never despaired of their country, and who cheerfully risked their fortunes in its support, lost their property; while the timid, who looked forward to the re-establishement of British government, not only saved their former possessions, but often increased them. In the American revolution, for the first time, the friends of the successful party were the losers.

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[1] *The History of South Carolina.* By David Ramsay. (Written 1808. Published, Newberry, S. C., 1858), 98, 102.

The enthusiasm of the Americans, and their confidence in the money, gave the Congress the same advantage in carrying on the war which old countries derive from the anticipation of their permanent funds. It would have been impossible to have kept together an American army for so many years without this paper expedient. Though the bills of credit operated as a partial tax on the monied interest, and ruined many individuals, yet it was productive of great national benefits by enabling the popular leaders to carry on a necessary defensive war. . . .

The paper currency continued to have a partial circulation in the northern States for a year after a scale of depreciation was fixed. It gradually diminished in value till the summer of 1781. By common consent, it then ceased to have any currency. Like an aged man, expiring by the decays of nature without a sigh or a groan, it gently fell asleep in the hands of its last possessors, and continued so for ten years; when the Congress paper dollars were funded at the rate of 100 for one of silver.

D. *Issues of Paper Money by the States, 1781–1788* [1]

After the disappearance of the continental paper money from circulation, seven of the states, under the plea of necessity, plunged afresh into paper money emissions during the years 1781 to 1788. The history of these issues was the same as that of the continental currency — overissue, depreciation, and disturbance of trade. A vivid picture of the effects in two of the states is drawn for us by Brissot de Warville, a French traveler of liberal views, who usually had only words of praise for things American.

The port of Newport is considered as one of the best in the United States. The bottom is good, the harbour capable of receiving the largest ships, and seems destined by nature to be of great consequence. This place was one of the principal scenes of the last war. The successive arrival of the American, English, and French armies, left here a considerable quantity of money.[2]

Since the peace every thing is changed.[3] The reign of solitude is only interrupted by groups of idle men, standing with folded arms at the corners of the streets; houses falling to ruin; miserable shops,

[1] *New Travels in the United States of America.* By Jean Pierre Brissot de Warville (Dublin, 1792), 144–7, 176–8.

[2] The English destroyed all the fine trees of ornament and fruit: they took a pleasure in devastation.

[3] This town owed a part of its prosperity to the slave trade, which is at present suppressed.

which present nothing but a few coarse stuffs, or baskets of apples, and other articles of little value; grass growing in the public square, in front of the court of justice; rags stuffed in the windows, or hung upon hideous women and lean unquiet children.

Every thing announces misery, the triumph of ill faith, and the influence of a bad government. . . .

At Newport the people, deceived by two or three knaves, have brought on their own misery, and destroyed the blessings which Nature had lavished upon them. They have themselves sanctioned fraud; and this act has rendered them odious to their neighbors, driven commerce from their doors, and labour from their fields.

Read again, my friend, the charming description given of this town and this State, by M. de Crèvecoeur.[1] It is not exaggerated. Every American whom I have questioned on this subject, has described to me its ancient splendor, and its natural advantages, whether for commerce, agriculture, or the enjoyments of life.

The State of Rhode Island will never again see those happy days, till they take from circulation their paper money, and reform their government.

. . . but this State [New Jersey] is ravaged by a political scourge, more terrible than either; it is paper money. This paper is still, in New Jersey, what the people call a legal tender, that is, you are obliged to receive it at its nominal value, as a legal payment.

I saw, in this journey, many inconveniences resulting from this fictitious money. It gives birth to an infamous kind of traffic, that of buying and selling it, by deceiving the ignorant; a commerce which discourages industry, corrupts the morals, and is a great detriment to the public. This kind of stock-jobber is the enemy to his fellow-citizens. He makes a science of deceiving; and this science is extremely contagious. It introduces a general distrust. A person can neither sell his land, nor borrow money upon it; for sellers and lenders may be paid in a medium which may still depreciate, they know not to what degree it may depreciate. A friend dares not trust his friend. Instances of perfidy of this kind have been known, that are horrible. Patriotism is consequently at an end, cultivation languishes, and commerce declines. How is it possible, said I to Mr. Livingston, that a country, so rich, can have recourse to paper money? New Jersey furnishes productions in abundance to New York and

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[1] *Letters from an American Farmer* (1770–1781). By St. John de Crèvecœur (London, 1782). — Ed.

Philadelphia. She draws money, then, constantly from those places; she is their creditor. And shall a creditor make use of a resource which can be proper only for a miserable debtor; How is it that the members of your legislature have not made these reflections? The reason of it is very simple, replied he: At the close of the ruinous war, that we have experienced, the greater part of our citizens were burdened with debts. They saw in this paper money, the means of extricating themselves; and they had influence enough with their representatives to force them to create it. — But the evil falls at length on the authors of it, said I; they must be paid themselves, as well as pay others, in this same paper; why do they not see that it dishonours their country, that it ruins all kinds of honest industry, and corrupts the morals of the people; Why do they not repeal this *legal tender?* A strong interest opposes it, replied he, of stock-jobbers and speculators. They wish to prolong this miserable game, in which they are sure to be the winners, though the ruin of their country should be the consequence. We expect relief only from the new situation, which takes away from the States the power of making paper-money. All honest people wish the extinction of it, when silver and gold would reappear; and our national industry would soon repair the ravages of the war.

IV. Social Effects of the Revolution

Views of a Contemporary, 1775–1783[1]

Whatever else it may involve war always brings changes; it throws men out of their accustomed callings and makes new demands upon them. The War of the Revolution, which severed the political ties with England and introduced a new government, which interrrupted the ordinary lines of trade and disorganized business by the introduction of a depreciating paper money, had particularly marked effects. These are described by Ramsay, a physician of South Carolina, and a very able and judicious observer of contemporary events.

The American revolution, on the one hand, brought forth great vices; but on the other hand, it called forth many virtues, and gave occasion for the display of abilities which, but for that event, would have been lost to the world. When the war began, the Americans were a mass of husbandmen, merchants, mechanics and fishermen; but the necessities of the country gave a spring to the active powers of the inhabitants, and set them on thinking, speaking and acting,

[1] *The History of the American Revolution.* By David Ramsay (Philadelphia, 1789), II, 315–6.

in a line far beyond that to which they had been accustomed. The difference between nations is not so much owing to nature, as to education and circumstances. While the Americans were guided by the leading strings of the mother country, they had no scope nor encouragement for exertion. All the departments of government were established and executed for them, but not by them. In the years 1775 and 1776 the country, being suddenly thrown into a situation that needed the abilities of all its sons, these generally took their places, each according to the bent of his inclination. As they severally pursued their objects with ardor, a vast expansion of the human mind speedily followed. This displayed itself in a variety of ways. It was found that their talents for great stations did not differ in kind, but only in degree, from those which were necessary for the proper discharge of the ordinary business of civil society. . . .

. . . It seemed as if the war not only required, but created talents. Men whose minds were warmed with the love of liberty, and whose abilities were improved by daily exercise, and sharpened with a laudable ambition to serve their distressed country, spoke, wrote, and acted, with an energy far surpassing all expectations which could be reasonably founded on their previous acquirements.

The Americans knew but little of one another, previous to the revolution. Trade and business had brought the inhabitants of their seaports acquainted with each other, but the bulk of the people in the interior country were unacquainted with their fellow citizens. A continental army, and a Congress composed of men from all the States, by freely mixing together, were assimilated into one mass. Individuals of both, mingling with the citizens, disseminated principles of union among them. Local prejudices abated. By frequent collision asperities were worn off, and a foundation was laid for the establishment of a nation, out of discordant materials. Intermarriages between men and women of different States were much more common than before the war, and became an additional cement to the union. Unreasonable jealousies had existed between the inhabitants of the eastern and of the southern States; but on becoming better acquainted with each other, these in a great measure subsided. A wiser policy prevailed. Men of liberal minds led the way in discouraging local distinctions, and the great body of the people, as soon as reason got the better of prejudice, found that their best interests would be most effectually promoted by such practices and sentiments as were favourable to union. Religious bigotry had broken in upon the peace of various sects, before the American war.

This was kept up by partial establishments, and by a dread that the church of England through the power of the mother country, would be made to triumph over all other denominations. These apprehensions were done away by the revolution. . . . The world will soon see the result of an experiment in politics, and be able to determine whether the happiness of society is increased by religious establishments, or diminished by the want of them.

Though schools and colleges were generally shut up during the war, yet many of the arts and sciences were promoted by it. The Geography of the United States before the revolution was but little known; but the marches of the armies, and the operations of war, gave birth to many geographical enquiries and discoveries, which otherwise would not have been made. . . . The necessities of the States led to the study of Tactics, Fortification, Gunnery, and a variety of other arts connected with war, and diffused a knowledge of them among a peaceable people, who would otherwise have had no inducement to study them. . . .

The science of government, has been more generally diffused among the Americans by means of the revolution. The policy of Great Britain, in throwing them out of her protection, induced a necessity of establishing independent constitutions. This led to reading and reasoning on the subject. The many errors that were at first committed by unexperienced statesmen, have been a practical comment on the folly of unbalanced constitutions, and injudicious laws. . . .

When Great Britain first began her encroachments on the colonies, there were few natives of America who had distinguished themselves as speakers or writers, but the controversy between the two countries multiplied their number. . . .

. . . Such have been some of the beneficial effects, which have resulted from that expansion of the human mind, which has been produced by the revolution, but these have not been without alloy.

To overset an established government unhinges many of those principles, which bind individuals to each other. A long time, and much prudence, will be necessary to reproduce a spirit of union and that reverence for government, without which society is a rope of sand. The right of the people to resist their rulers, when invading their liberties, forms the corner stone of the American republics. This principle, though just in itself, is not favourable to the tranquillity of present establishments. The maxims and measures, which in the years 1774 and 1775 were successfully inculcated and

adopted by American patriots, for oversetting the established government, will answer a similar purpose when recurrence is had to them by factious demagogues, for disturbing the freest governments that were ever devised.

War never fails to injure the morals of the people engaged in it. The American war, in particular, had an unhappy influence of this kind. Being begun without funds or regular establishments, it could not be carried on without violating private rights; and in its progress, it involved a necessity for breaking solemn promises, and plighted public faith. The failure of national justice, which was in some degree unavoidable, increased the difficulties of performing private engagements, and weakened that sensibility to the obligations of public and private honor, which is a security for the punctual performance of contracts. . . .

On the whole, the literary, political, and military talents of the citizens of the United States have been improved by the revolution, but their moral character is inferior to what it formerly was. So great is the change for the worse, that the friends of public order are loudly called upon to exert their utmost abilities, in extirpating their vicious principles and habits, which have taken deep root during the late convulsions.

CHAPTER VI

AMERICAN COMMERCE AND COMMERCIAL POLICY, 1783–1812

I. Efforts to Secure a Commercial Treaty with England

A. *England should not make a Commercial Treaty with the United States, 1783*[1]

After peace was declared and political independence was secured, the first question that presented itself to the new nation was that of the terms upon which she would carry on trade with other nations. The United States desired to make commercial treaties with other nations guaranteeing reciprocal commercial privileges, and endeavored, though unsuccessfully, to incorporate some such provisions in the treaty of peace with England. Pitt, who had just become prime minister, tried in turn to secure the adoption of a treaty that would grant freedom of trade between the United States and the British colonies as well as Great Britain. It was against this proposal that Lord Sheffield wrote his well-known book, urging that no action be taken, as the Americans must buy of England in any case.

We are told it is proper to court the trade with the American States, but their treaties with France and Holland in direct terms forbid our being put on a better footing than those countries.[2]

The state of our manufactures make it unnecessary, and nothing can be more weak than the idea of courting commerce.[3] America

[1] *Observations on the Commerce of the American States.* By Lord John Sheffield (1st edition, London, 1783), 59–70, *passim.*

[2] Article II, of the Treaty of Commerce between France and the United States of America, "The most Christian King and the United States engage mutually not to grant any particular favour to other nations, in respect of commerce and navigation, which shall not immediately become common to the other party, who shall enjoy the same favour freely."

[3] By ineffectual and unnecessary attempts to court American commerce, we shall disgust nations with whom we have great intercourse, and prejudice the best trade we have. Our exports to the Baltic and the countries North of Holland are equal to what our exports to the American States were at any time, and more real British shipping has been employed to the North, than had ever been employed to the American States. Before the war, very few British ships went to the ports north of Philadelphia; they went principally to the Southern States. . . .

will have from us what she cannot get cheaper and better elsewhere, and she will sell to us what we want from her as cheap as she will to others. . . . The truth is, we want little of her produce in Great-Britain, coarse tobacco excepted. The finest tobacco grows in the islands, and in South America. The indigo of the islands and of South America is infinitely better than that of North America, but we must take that and naval stores, and other articles from the American States which may be got as good or better elsewhere, in return for our manufactures, instead of money. In payment, for want of other sufficient returns, large quantities of tobacco must come to Great-Britain, and we can afford to give the best price for it, by taking it in exchange for our manufactures. . . .

Instead of exaggerating the loss suffered by the dismemberment of the empire, our thoughts may be employed to more advantage in considering what our situation really is, and the greatest advantage that can be derived from it. It will be found better than we expect, nor is the independence of the American States, notwithstanding their connection with France, likely to interfere with us so essentially as has been apprehended, except as to the carrying trade, the nursery for seamen. The carriage of our produce is nothing in comparison with that of America; a few tobacco ships will carry back as much of our manufactures as all the American States will consume. We must therefore retain the carrying trade wherever we possibly can. — But the demand for our manufactures will continually encrease with the population of America. Those who have been disposed to despond may comfort themselves with the prospect, that if the American States should hereafter be able to manufacture for themselves, as the consumption of the manufactures of England decreases with them, the demand will encrease elsewhere; . . .

If manufacturers should emigrate from Europe to America, at least nine-tenths will become farmers; they will not work at manufactures when they can get double the profit by farming.

No American articles are so necessary to us, as our manufactures, &c., are to the Americans, and almost every article of the produce of the American States, which is brought into Europe, we may have at least as good and as cheap, if not better, elsewhere. Both as a friend and an enemy America has been burthensome to Great Britain. It may be some satisfaction to think, that by breaking off rather prematurely, Great Britain may find herself in a better situation in respect to America, than if she had fallen off when more ripe. . . .

It will not be an easy matter to bring the American States to act

as a nation; they are not to be feared as such by us. It must be a long time before they can engage, or will concur in any material expence. A Stamp act, a Tea act, or such act that never can again occur, could alone unite them; their climate, their staples, their manners, are different; their interests opposite; and that which is beneficial to one is destructive to the other. In short, every circumstance proves that it will be extreme folly to enter into any engagements, by which we may not wish to be bound hereafter. It is impossible to name any material advantage the American States will, or can give us in return, more than what we of course shall have. No treaty can be made with the American States that can be binding on the whole of them. The act of Confederation does not enable Congress to form more than general treaties: at the moment of the highest authority of Congress the power in question was withheld by the several States. No treaty that could be made would suit the different interests. When treaties are necessary, they must be made with the States separately. Each State has reserved every power relative to imports, exports, prohibitions, duties, &c., to itself. But no treaty at present is necessary.

B. *Why England would not make a Commercial Treaty, 1785* [1]

One of the greatest weaknesses of the Confederation was the reservation by the several states of all the important powers over finance, foreign relations, and similar subjects. Consequently the Congress of the Confederation was unable to levy taxes or to make treaties without first securing the consent of all the states. "We are one nation today, and thirteen tomorrow," said Washington; "who will treat with us on those terms?" Whether the ostensible reason urged by the Duke of Dorset was the real one or not, the fact remained that England refused to negotiate a commercial treaty with us.

Paris, March 26, 1785.

GENTLEMEN,

Having communicated to my Court the readiness you expressed in your letter to me of the 9th of December, to remove to London, for the purpose of treating upon such points as may materially concern the interests, both political and commercial, of Great Britain and America; and having, at the same time, represented that you declared yourselves to be fully authorized and empowered to negotiate, I have been, in answer thereto, instructed to learn from you,

[1] *Letter from the Duke of Dorset to the American Commissioners.* Diplomatic Correspondence of the United States of America, 1783–9 (Washington, 1837), I, 574–5.

gentlemen, what is the real nature of the powers with which you are invested, whether you are merely commissioned by Congress, or whether you have received separate powers from the respective States. A committee of North American merchants have waited upon his Majesty's principal Secretary of State for Foreign Affairs, to express how anxiously they wished to be informed upon this subject, repeated experience having taught them in particular, as well as the public in general, how little the authority of Congress could avail in any respect, where the interests of any one individual State was even concerned, and particularly so where the concerns of that particular State might be supposed to militate against such resolutions as Congress might think proper to adopt.

The apparent determination of the respective States to regulate their own separate interests, renders it absolutely necessary towards forming a permanent system of commerce, that my Court should be informed how far the Commissioners can be duly authorized to enter into any engagements with Great Britain, which it may not be in the power of any one of the States to render totally fruitless and ineffectual.

I have the honor to be, &c., DORSET

C. *British Merchants sure of the American Market, 1776* [1]

While Dean Tucker was very bitter against the colonists for rebelling against the mother country, he urged the people of England to accept separation philosophically, as they would lose nothing in the way of trade. The long credit secured by Americans from English merchants would always lead them, he argued, to prefer British goods to those of any other country.

ANSWER 5. The Trade of *Great-Britain* with the Colonies rests on a much firmer Foundation than that of a *nominal* Subjection by Means of *Paper* Laws and *imaginary* Restrictions: — A Foundation so very obvious, as well as secure, that it is surprising it hath not been taken Notice of in this Dispute. The Foundation, I mean, is, the Superiority of the *British* Capitals over those of every other Country in the Universe. As a signal Proof of this, let it be observed, that the *British* Exporter gives long Credit to almost every Country, to which he sends his Goods; but more especially he used to do so to *North-America:* Yet when he imports from other Countries, he receives no Credit. On the Contrary, his general Custom is, either

[1] *A Series of Answers to Certain Objections against Separation from the Rebellious Colonies.* By Josiah Tucker (Glocester, 1776), 30–1.

to advance Money beforehand, or at least to pay for the Goods as soon as they arrive. Hence therefore it comes to pass, that the Trade of the World is carried on, in a great Measure, by *British* Capitals; and whilst this Superiority shall last, it is morally impossible that the Trade of the *British* Nation can suffer any very great or alarming Diminution. Now the *North-Americans*, who enjoyed this Advantage to a greater Degree than any others, by purchasing Goods of us at long Credit, and then selling the same Goods to the *Spaniards* for ready Money, will find by Experience, that in quarrelling with the *English*, they have quarrelled with their best Friends. Let them therefore go wherever they please, and try all the Nations on the Globe. When they have done, they will suppliantly return to *Great-Britain*, and entreat to be admitted into the Number of our Customers, not for ours, but for their own Sakes.

D. *Advantages of the English Market to Americans, 1783*[1]

Writing several years after Dean Tucker, Lord Sheffield used the same argument against making a commercial treaty with the United States, namely that the superior credit facilities they enjoyed in England would bring them to that market in preference to any other. Other reasons were also given, such as the ability to secure best in London an assorted general cargo. As a matter of fact American trade returned generally into the old channels after the war and was carried on chiefly with England.

At least four-fifths of the importations from Europe into the American States, were at all times made upon credit; and undoubtedly the States are in greater want of credit at this time than at former periods. It can be had only in Great Britain.[2] The French who gave them credit, are all bankrupts: French merchants cannot give much credit. The Dutch in general have not trusted them to any amount; those who did have suffered; and it is not the custom of the Dutch to give credit, but on the best security. It is therefore obvious from this and the foregoing state of imports and exports, into what channels the commerce of the American States must in-

[1] *Observations on the Commerce of the American States.* By Lord John Sheffield (2d edition, London, 1784), 200–7, 263–4, 272.

[2] This credit was so extensive, and so stretched beyond all proper bounds, as to threaten the ruin of every British merchant trading to America in the year 1772. The long credit given to America, the difficulty of recovering debts (which from the feebleness of the new governments, must become still more difficult) greatly prejudiced our trade with that country, and made bankrupts of almost three-fourths of the merchants of London trading to America, particularly to Virginia and Maryland. It is said that more goods have been sent to America in 1783 than that country could possibly pay for in three years.

evitably flow, and that nearly four-fifths of their importations[1] will be from Great Britain directly. Where articles are nearly equal, the superior credit afforded by England will always give the preference. The American will, doubtless, attempt to persuade the British merchant to be his security with foreigners; but it is certain many foreign articles will go to America through Great Britain, as formerly, on account of the difficulty the American merchant would find in resorting to every quarter of the world to collect a cargo. The Americans send ships to be loaded with all sorts of European goods. A general cargo for the American market cannot be made up on such advantageous terms in any part of the world as in England. In our ports, all articles may be got with dispatch — a most winning circumstance in trade; but wherever they carry fish, and those articles for which England cannot be the entrepot, they will take back wine, silk, oil, &c. from Spain and Portugal, and the Mediterranean.[2] But

[1] Notwithstanding the resolves of Congress, and all the disadvantages arising from the war, British manufactures, to a vast amount, had the preference, and in great part supplied America, though burdened with double freight, double port charges and commission, and a circuitous voyage through a neutral port. Besides, what went to the Americans through Halifax, New York, South Carolina and Georgia, many ships which cleared for New York and Halifax at the ports of London, Bristol, Liverpool, Scotland, and Ireland, went at great risque, and in the face of act of Congress, directly to North America. . . . These facts being notorious, can it be supposed, our manufactures being so much better, so much cheaper, and so much more suitable, as to support themselves against all these disadvantages in war, that they will not occupy the American markets in peace? And no small advantage may arise to this country from the distrust the French and Americans have of each other in commercial matters. The French fearing to consign their goods to Americans, sent out factors; while the latter, equally jealous, sent their own people to transact their business in France, where several houses were established during the war, which since the peace are settled or settling in England. American agents were also in Holland to little advantage.

The Americans must seek the commerce of Britain, because our manufactures are most suitable. Few trading Americans speak any foreign language; they are acquainted with our laws as well as with our language. They will put a confidence in British merchants, which they will not in those of other nations, with whose people they are unacquainted, as well as with their laws and language. They have impressions of the arbitrary proceedings of the French; they will recollect, that when they went to the French islands, they were not permitted to sell the provisions, &c., they had imported, until the French merchants had sold all theirs; that the French took their goods at what price they pleased, and charged them as they thought proper for their own.

[2] It is not probable the American States will have a very free trade in the Mediterranean; it will not be the interest of any of the great maritime powers to protect them there from the Barbary States. If they know their interests, they will not encourage the Americans to be carriers. That the Barbary States are advantageous

if we maintain the carrying trade, half the commerce of the American States, or less than half, without the expence of their government and protection, and without the extravagance of bounties, would be infinitely better for us than the monopoly, such as it was. . . .

What was foretold in the first edition of this work, has now [1784] actually happened. Every account from America says, that British manufactures are selling at a considerable profit, while other European goods cannot obtain the first cost. Every day's experience shews, that this country, from the nature and quality of its manufactures, and from the ascendancy it has acquired in commerce, will command three-fourths of the American trade. The American merchants solicit a correspondence, and beg for credit, because, while they feel their own want of capital, they know that our traders are more liberal, and our goods cheaper and better, than any in Europe. And the only danger is, not that the American merchants will ask for too few manufactures, but that they will obtain too many. The American consumers have been impoverished by an expensive war, which has bequeathed them many taxes to pay; and they will not be more punctual in their remittances at a time when they are associating against the payment of old debts. It may be for our interest to run some hazard, however, at the renewal of our correspondence, by accepting a trade which is pressed upon us by willing customers. But how far it may be prudent for the British merchant to comply with orders, till the several States hold out some regulations, that will give them security, is a question. . . .

It is well known, that numbers of our merchants have been made bankrupts through the bad payment of the Americans.

E. *Trade between England and the United States, 1784–1790* [1]

That Dean Tucker and Lord Sheffield were right in saying that the political separation of the colonies from the mother country and the refusal on the part of England to negotiate a commercial treaty with the United States would not materi-

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to the maritime powers is certain. If they were suppressed the little States of Italy &c. would have much more of the carrying trade. . . . The Americans cannot protect themselves from the latter; they cannot pretend to a navy. In war, New England may have privateers, but they will be much fewer than they have been; they will be few indeed, if we do not give up the Navigation Act. The best informed say, not less than three-fourths of the crews of the American privateers, during the late war, were Europeans.

[1] *A Statistical View of the Commerce of the United States of America.* By Timothy Pitkin (2d edition, New York, 1817), 30.

ally affect the trade between the two countries, is proved by the table here given. After peace was declared trade was renewed on an even larger scale. One result of this was to show that political control was not necessary to secure the trade of a country.

The following is an account of the imports into England from the United States, and exports to the United States from that country in sterling money, from 1784 to 1790, taken from the English customhouse books — viz.

Years	*Imports*	*Exports*
1784	£ 749,345	£3,679,467
1785	893,594	2,308,023
1786	843,119	1,603,465
1787	893,637	2,009,111
1788	1,023,789	1,886,142
1789	1,050,198	2,525,298
1790	1,191,071	3,431,778

II. Effects of the Failure to Negotiate a Commercial Treaty

A. *Trade between the West Indies and North America before 1774*[1]

One of the most lucrative and mutually advantageous branches of trade carried on by the colonists was that with the West Indies. To the planters in those islands it was absolutely essential, while to the American colonies it was less vital but not less profitable. After American independence was acknowledged trade between the North American states and the English West Indies was of course impossible under the navigation acts, which permitted colonial trade to be carried on only in British ships. The impossibility of renewing this trade had disastrous consequences. Edwards was governor of Jamaica and wrote a very valuable book on the West Indies.

It may, I think, be affirmed, without hazard of contradiction, that if ever there was any one particular branch of commerce in the world, that called less for restraint and limitation than any other, it was the trade which, previous to the year 1774, was carried on between the planters of the West Indies and the inhabitants of North America. It was not a traffick calculated to answer the fantastick calls of vanity, or to administer gratification to luxury or vice; but to procure food for the hungry, and to furnish materials (scarce less important than food) for supplying the planters in two capital objects, their buildings, and packages for their chief staple productions, sugar, and rum. Of the necessity they were under on the latter account, an idea may be

[1] *The History, Civil and Commercial, of the British Colonies in the West Indies.* By Bryan Edwards (4th edition, London, 1807), II, 485–6.

formed from the statement in the preceding chapter of the importation of those commodities into Great Britain; the cultivation of which must absolutely have stopped without the means of conveying them to market.

For the supply of those essential articles, lumber, fish, flour, and grain, America seems to have been happily fitted, as well from internal circumstances, as her commodious situation; and it is to a neighbourly intercourse with that continent, continued during one hundred and thirty years, that our sugar plantations in a great measure owe their prosperity. . . .

B. *The West Indies should not be Opened to American Trade, 1783*[1]

It was proposed by Pitt to open the West Indies to trade with the American states, and against this Lord Sheffield argued warmly, urging that all necessary supplies could be furnished by Nova Scotia, by Ireland, and by England.

It should seem, that there must be some other object in reserve, which is not yet acknowledged, besides the cheapness of lumber and provisions, and a market for rum, to account for the eagerness, which some express, for opening the navigation of the West Indies. The assertion, that our islands must starve if they are not opened to American shipping, is a curious instance of the slight ground on which men will be clamorous: . . . If our islands are so helpless, and would rather sacrifice our marine than make so small an effort as to fit our vessels in addition to those of Bermuda, and our remaining colonies, sufficient to supply themselves with provisions and lumber, they deserve to suffer or to pay an extraordinary price.

C. *American Vessels should be Admitted to Trade with the West Indies, 1784*[2]

In reply to Lord Sheffield's arguments many rejoinders were written, from one of which a brief extract may be given. In this it was urged that Great Britain would profit most by the proposed arrangement.

It is expedient however to examine still more fully, what the grand leading argument that Lord Sheffield adduces in favour of the necessity of totally excluding them from a participation in the

[1] *Observations on the Commerce of the American States.* By Lord John Sheffield (2d edition, London, 1784), 146–7.

[2] *A Letter from an American . . . on Lord Sheffield's Pamphlet. . . .* Said to be written by William Bingham (Philadelphia, 1784), 10–11.

British West India trade, amounts to. He is fearful that they will thereby become the carriers of the produce of the islands to the place of its consumption, which will create an interference of foreign vessels, thereby lessening the number of seamen, and consequently the naval force of the country.

But, if in addition to all that I have already said, I answer, that in return for this accommodation which he may call indulgent, but which I have clearly evinced to be the interest of Great Britain, consulting the welfare of her islands, to grant.

I say, if in return for this accommodation, her subjects may be admitted to a free ingress and egress to and from the ports of the United States — What reply will the advocates for this system make? — What will become of Lord Sheffield's reasoning, when weighed in the scale of comparative proportion? I only wish them to comprehend the magnitude of the advantage. Men of weak or limited understandings, will be incapable of extending their ideas, so as to embrace the vast field it opens to an enlightened mind.

In the first place, they will not assuredly deny, that the productions of the United States, to the transportation of which, from the proposed arrangement, they are freely to be admitted, will furnish twice the quantity of bulky materials, that the exports of the West Indies do, and will consequently employ twice the quantity of shipping.— To stamp conviction in regard to the truth of this assertion, let them take a view of the rice, indigo, and lumber of Georgia and South Carolina; — the naval stores, lumber, and tobacco of North Carolina; — the tobacco, wheat, Indian corn, &c. of Virginia and Maryland; — the flour, lumber, corn, and various provisions of Pennsylvania, Delaware, Jersey and New-York; — the fish, lumber, live stock, &c. of the New England States.

D. *Effects of the Prohibition of Trade between the West Indies and the United States, 1780–1787* [1]

In 1783 Parliament passed an act excluding American vessels from trade with the British West Indies. As a result of the stoppage of this trade the accustomed supplies of fish, breadstuffs, meat, etc., from America, were cut off, and thousands of persons on the islands actually died of starvation. These disastrous effects are vividly portrayed by Governor Edwards.

On the 2d July 1783 the importation into the British West Indies of every species of naval stores, staves, and lumber, live stock, flour,

[1] *The History, Civil and Commercial, of the British Colonies in the West Indies.* By Bryan Edwards (4th edition, London, 1807), II, 495–515, *passim.*

and grain of all kinds, the growth of the American states, was confined to British ships legally navigated; and the export to those states of West Indian productions, was made subject to the same restriction; while many necessary articles (as salted beef and pork, fish, and train-oil) formerly supplied by America, were prohibited altogether, it was considered as a measure merely temporary and experimental; and until a plan of permanent regulation should be agreed to by both countries, it was thought neither impolitick nor unjust, that Great Britain should reserve in her own hands the power of restraining or relaxing her system of commercial arrangements, as circumstances might arise to render the exercise of such a power prudent and necessary.

In these reasons the West Indian merchants, and such of the planters as were resident in Great Britain, acquiesced; but on the first meeting of a new parliament, in May, 1784, (another change having taken place in the mean time in the British administration) [1] the business of a commercial intercourse between the West Indies and the States of America, pressed itself on the attention of government with a force which was not to be resisted. Petitions, complaints, and remonstrances, were poured in from every island in the West Indies. Some of the petitioners represented that they had not six weeks provisions in store, and all of them anticipated the most dreadful consequences, if the system of restriction should be much longer persisted in; expecting nothing less than a general revolt of their slaves, in the apprehension of perishing of hunger. . . .

On the whole, the lords of the committee strongly recommended a strict and rigid adherence to the measure of confining the intercourse between our West Indian islands and America, to British ships only, as a regulation of absolute necessity; considering any deviation from it, as exposing the commerce and navigation of Great Britain to the rivalry of revolted subjects, now become ill-affected aliens. . . .

These doctrines and opinions of the lords of the committee of council were unfortunately approved and adopted in their fullest extent by the British government; . . .

But there was this misfortune attending the sugar planters, that their wants were immediate; and of a complexion affecting not only

[1] The Right Honourable William Pitt, who had been Chancellor of the Exchequer from 10th July, 1782, to 5th April, 1783, was reappointed to that office, and also nominated First Lord of the Treasury, on the 27th of December, 1783, soon after which the parliament was dissolved.

property, but life. Whatever resources might ultimately be found in the opulence and faculties of the mother-country, it was impossible, in the nature of things, to expect from so distant a quarter an adequate supply to a vast and various demand, coming suddenly and unexpectedly. Many of the sugar islands too had suffered dreadfully under two tremendous hurricanes, in 1780 and 1781, in consequence whereof (had it not been for the casual assistance obtained from prize-vessels) one-half of their negroes must absolutely have perished of hunger. Should similar visitations occur, the most dreadful apprehensions would be realized; and I am sorry to add, *that realized they were!*

I have now before me a report of the committee of the assembly of Jamaica, on the subject of the slave trade, wherein the loss of negroes in that island, in consequence of those awful concussions of nature, and the want of supplies from America, is incidentally stated. . . .

"We shall now (say the committee) point out the principal causes to which this mortality of our slaves is justly chargeable. It is but too well known to the house, that in the several years 1780, 1781, 1784, 1785, and 1786, it pleased Divine Providence to visit this island with repeated hurricanes, which spread desolation throughout most parts of the island; . . .

"We decline to enlarge on the consequences which followed lest we may appear to exaggerate; but having endeavoured to compute, with as much accuracy as the subject will admit, the number of our slaves whose destruction may be fairly attributed to these repeated calamities, and the unfortunate measure of interdicting foreign supplies, and for this purpose compared the imports and returns of negroes for the last seven years, with those of seven years preceding, we hesitate not, after every allowance for adventitious causes, to fix the whole loss at fifteen thousand: THIS NUMBER WE FIRMLY BELIEVE TO HAVE PERISHED OF FAMINE, OR OF DISEASES CONTRACTED BY SCANTY AND UNWHOLESOME DIET, BETWEEN THE LATTER END OF 1780, AND THE BEGINNING OF 1787."

Such (without including the loss of negroes in the other islands, and the consequent diminution in their cultivation and returns) was the price at which Great Britain thought proper to retain her exclusive right of supplying her sugar islands with food and necessaries!

III. Economic Reasons for the Constitution

A. *Commercial Difficulties Led to Constitution, 1783–1789* [1]

Under the ineffective Confederation no common legislation on commercial matters was possible, and the conflicting commercial and tariff legislation of the different states led inevitably to a demand for a stronger central government which could deal with these matters as a whole. Seybert was a Philadelphia physician and at one time a member of Congress.

During the war of the revolution, our commerce was suspended; after the peace, in 1783, our trade continued to languish; it had to contend with domestic and foreign obstacles; foreign nations entertained a jealousy concerning these states; at home a rivalship was prevalent amongst the several members of the confederacy, and checked the prosperity of the nation. Each of the thirteen independent sovereignties, contemplated its own intermediate interests; some of the states declared the commercial intercourse with them, to be equally free to all nations, and they cautiously avoided to lay duties on such merchandise as was subject to them, when imported into other states. To provide a fund to discharge the public debt, and to pay the arrears due to the soldiers who fought the battles of the revolution, it was proposed in Congress, during the operation of the articles of Confederation, to lay a duty of five per centum ad valorem, on foreign merchandise imported into the United States; the opposition of the state of Rhode Island, was, of itself, adequate to defeat this plan.[2] When the state of Pennsylvania laid a duty on foreign merchandise imported, the state of New-Jersey, equally washed by the waters of the Delaware River, admitted the same articles free of duty: they could easily be smuggled into one state from the other. The several states laid different rates of duty on foreign tonnage: in some one shilling sterling per ton was imposed on vessels, which in other states paid three shillings sterling per ton. Such was the misunderstanding amongst the several states; there were no general commercial regulations for them, nor could the Congress enforce any, unless they were adopted by every member of the federation; the opposition of any one of the states, could prevent the passage of any act on the subject.

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[1] *Statistical Annals . . . of the United States.* By Adam Seybert (Philadelphia, 1818), 57-9.

[2] Proceedings of Congress, 18th April, 1783.

Other nations were well disposed to take advantage of our domestic embarrassments. Very soon after the conclusion of the American war, Great Britain was not alone opposed to our commercial prosperity; France and Spain were equally jealous of it; we were by these nations considered as their rival, possessed of the means and the character to dispute the benefits arising from navigation. Our intercourse with all these nations, was placed under restrictions; their connection with us was measured by the scale of interest. After France and Spain had become parties to our revolutionary war, they consented to admit foreign vessels into their West India ports, whereby they were enabled to man their fleets, and to obtain subsistence for the inhabitants. Immediately after the preliminaries of the peace were signed, in 1783, these nations abridged, and very soon thereafter, abolished the privileges, they had granted to foreigners in this branch of their trade. By an *arret* of the 30th of August, 1784, foreign vessels, of more than sixty tons, were not permitted to enter the ports of the French West Indies; the merchandise that was allowed to be entered, was enumerated and very limited; it consisted principally of articles of first necessity, and in return for the American cargoes, molasses, rum, and such merchandise as had been imported from France could only be taken away.[1] Recently the same system of restrictions has been again adopted.[2]

Soon after the peace, in 1783, the United States offered to enter into treaties of commerce with Great Britain, France, Spain and Portugal;[3] all our overtures were, under various pretexts, rejected.

Surrounded by difficulties, it became a paramount duty to cure the palsy which afflicted us at home. It was manifest, that general regulations were essential to the safety and welfare of the Union; it was absolutely necessary, that the power to regulate and control our intercourse with foreign nations, should be confided to Congress alone; and it was that conviction, which, principally, induced the people of the United States, to call the convention to revise the articles of the confederation.

By the Constitution of the United States, Congress has power,

"To regulate commerce with foreign nations, and among the several states, and within the Indian tribes."

"No tax or duty shall be laid on articles exported from any state; no preference shall be given, by any regulation of commerce or revenue,

[1] Macpherson, *loc. cit.*, vol. iv., pp. 55 and 56.

[2] Decree of the governor of Martinique, dated 14th March, 1816.

[3] Marshall's *Life of Washington*, vol. v., p. 182, et seq.

to the ports of one state over that of another; nor shall vessels, bound to or from one state, be obliged to enter, clear or pay duties in another."

"No state shall, without the consent of Congress, lay any impost or duties on imports or exports, except what may be absolutely necessary for executing its inspection laws; and the net produce of all duties and imposts, laid by any state, on imports or exports, shall be for the use of the Treasury of the United States, and all such laws shall be subject to the revision and control of Congress." [1]

The adoption of our present constitution, stamped upon us the characters of a nation; that instrument secured domestic tranquillity, and paved the way for amicable relations with foreign powers: at home it was succeeded by general prosperity; abroad, it gained for us the respect of foreign powers. . . .

B. *Economic Reasons in Favor of the Constitution, 1787* [2]

The moneyed men, the creditors, and those in general who wished stability and order introduced into the government, favored the adoption of the Constitution. Hamilton, who wrote and labored earnestly for the new Constitution, states the situation clearly.

The new Constitution has in favour of its success these circumstances. A very great weight of influence of the persons who framed it, particularly in the universal popularity of General Washington. The good-will of the commercial interest throughout the States, which will give all its efforts to the establishment of a government capable of regulating, protecting, and extending the commerce of the Union. The good-will of most men of property in the several States, who wish a government of the Union able to protect them against domestic violence, and the depredations which the democratic spirit is apt to make on property, and who are besides anxious for the respectability of the nation. The hopes of the creditors of the United States, that a general government possessing the means of doing it, will pay the debt of the Union. A strong belief in the people at large in the insufficiency of the present Confederation to preserve the existence of the Union, and of the necessity of the Union to their safety and prosperity; of course, a strong desire of a change, and a predisposition to receive well the propositions of the convention.

[1] Constitution of the United States, Art. I., Secs. viii, ix, x.

[2] *Works of Alexander Hamilton.* Edited by H. C. Lodge (New York, 1885–6), I, 400–2.

Against its success is to be put the dissent of two or three important men in the convention, who will think their characters pledged to defeat the plan; the influence of many *inconsiderable* men in possession of considerable offices under the State governments, who will fear a diminution of their consequence, power, and emolument, by the establishment of the general government, and who can hope for nothing there; the influence of some *considerable* men in office, possessed of talents and popularity, who, partly from the same motives, and partly from a desire of *playing a part* in a convulsion for their own aggrandizement, will oppose the quiet adoption of the new government (some considerable men out of office, from motives of ambition, may be disposed to act the same part). Add to these causes the disinclination of the people to taxes, and of course to a strong government; the opposition of all men much in debt, who will not wish to see a government established, one object of which is to restrain the means of cheating creditors; the democratical jealousy of the people, which may be alarmed at the appearance of institutions that may seem calculated to place the power of the community in few hands, and to raise a few individuals to stations of great pre-eminence; and the influence of some foreign powers, who, from different motives, will not wish to see an energetic government established throughout the States.

IV. Expansion of American Commerce

A. *Commerce more profitable than Manufactures, 1787* [1]

The reasons which had led to the expansion of colonial commerce were still operative after the Revolution, and commerce remained more profitable than manufactures for another twenty years. This, next to agriculture, formed the most lucrative occupation in the states. Brissot de Warville was a Frenchman of liberal views who lived and traveled in this country for a couple of years.

Some writers, among whom are found the celebrated Dr. Price and the Abbé Mably, have exhorted the independent Americans, if not to exclude exterior commerce entirely from their ports, at least to keep it within very contracted bounds. They pretend, that the ruin of republicanism in the United States can happen only from exterior commerce; because by great quantities of articles of luxury and a frivolous taste, that commerce would corrupt their morals, and without pure morals a republic cannot exist.

[1] *The Commerce of America with Europe.* By J. P. Brissot de Warville, and Etienne Clavière (London, 1794), 64–6, 74–9.

"Alas! What can the United States import from Europe, continues Dr. Price, except it be infection? I avow it, cries the Doctor, I tremble in thinking on the furor for exterior commerce, which is apparently going to turn the heads of the Americans. Every nation spreads nets around the United States, and caresses them, in order to gain a preference; but their interest cautions them to beware of these seductions." [1]

I am far from contradicting, *in its basis*, the opinion of these politicians. Moreover, I think, with Dr. Price, that the United States will one day be able to produce every thing necessary and convenient, but I am also of the opinion, that these two writers have considered the independent Americans in a false point of view; that they have not sufficiently observed the state of their circumstances; in fine, that *their circumstances and actual wants oblige them to have recourse to foreign commerce.* This is a truth which I propose to demonstrate; for I will prove that the independent Americans are in want of the necessaries and conveniences of life, and in some states, of luxuries, and that their habits and nature, added to other circumstances, will always prevent their renouncing them entirely.

I will prove, that having no manufactures, they cannot themselves supply these wants, and that they can have no manufactures for a long time to come.

That although they already possessed them, they ought to prefer to national ones those of exterior commerce, and that they should rather invite Europeans to their ports than frequent those of the European states.

Finally, that by the same reason that makes it impossible to exclude exterior commerce, in case of wants which alone it can supply, it is equally so to fix its boundaries. . . .

. . . All is reduced to two words; America has wants, and Europe has manufactures. . . .

But, if they had raw materials in plenty, they ought to be advised not to establish manufactures; or, to speak more justly, *manufactures could not be established; the nature of things ordains it so.* . . .

Besides there will be, for a considerable time to come, more to

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[1] Price's Observations, page 76. See the Abbé Mably, what he says of these observations, from page 146 to page 163. See also what the Comte de Mirabeau has added to the Observations of Dr. Price, in his Reflections printed at the end of his translation of this work, page 319. London edition, 1785.

He has, as a severe philosopher, treated on exterior commerce, and made abstraction of the actual situation of the Americans.

be gained in the United States, by the earth, which yields abundantly, than by manufactures — and man places himself in that situation where the greatest and most speedy gain is to be acquired.

As the population must, for many ages, be disproportioned to the extent of the United States, land will be cheap there during the same length of time, and consequently the inhabitants will for a long time be cultivators.

B. *The Trade with the Orient, 1784–1800* [1]

The enforcement of the navigation acts by England against the United States, which resulted in closing the West Indies to the latter and depriving them of the carrying trade to England, forced American shipowners to seek other markets. There followed after the Revolution one of the most adventurous and dramatic periods of expansion of our foreign trade. Pitkin was a member of the House of Representatives from Connecticut.

The trade of the United States with China commenced soon after the close of the revolutionary war. The first American vessel, that went on a trading voyage to China, sailed from the port of New-York, on the 22d day of February 1784, and returned on the 11th of May 1785. She was three hundred and sixty tons burthen, commanded by Captain John Green, and Samuel Shaw, Esq., agent for the owners. The Americans were well received by the Chinese government, and since that time, our trade with China has greatly increased.

In 1789, there were fifteen American vessels at Canton, being a greater number, than from any other nation, except Great-Britain. For many years, we have imported more Chinese goods, than were wanted for our consumption, and which we have again exported to other countries. The principal articles imported are teas, silks, nankeens, and China ware. Of these, tea is of the greatest value. The quantity of this article, imported and consumed within the United States, has increased with the increase of population. . . .

The value of goods paying duties ad valorem, which includes nankeens, all silk and cotton goods, and China ware, imported in 1797, from China and the East-Indies generally, but principally from the former, amounted to $922,161. The average value of goods paying the same duties, from China and other native Asiatic powers during the years 1802, 1803, and 1804, was about two millions three hundred thousand dollars. . . .

[1] *A Statistical View of the Commerce of the United States of America.* By Timothy Pitkin (2d edition, New York, 1817), 246-9, *passim.*

The balance of trade with China, as it appears on the custom-house books, is much against the United States; as few articles, either domestic or foreign, are shipped *directly* from the United States to that country. The payments for Chinese goods have been generally made in specie, the exportation of which is not entered at the custom-house, or in seal-skins taken in the South-Seas, and furs procured on the North-West Coast of America, and carried from those places, directly to China, without being brought to the United States. The amount of specie exported to China, it is difficult to ascertain with precision. . . . The great prices obtained at Canton, for furs procured on the North-West Coast of America, by those who were with Captain Cook, in his last voyage of discovery, induced others to engage in this trade. The enterprize of the Americans led them very early to engage in these long and hazardous trading voyages. The first of the kind, undertaken from the United States, was from Boston in 1788, in a ship commanded by captain Kendrick. This trade, at first, afforded great profits, to the concerned, and it has, ever since the year 1788, been carried on from the United States, to a considerable extent, and with greater or less profit.

C. *The Coasting Trade, 1791* [1]

Not merely was foreign trade developing, but the coastwise trade and fisheries were also growing. As long, however, as America depended upon Europe for her manufactured goods and upon China and the East and West Indies for her luxuries, the value and extent of the foreign trade were bound to exceed the coastwise trade.

The coasting trade has become very great, and the derangement of the West-India trade must extend it exceedingly, during the current year, from the failure of melasses. The increase of manufactures, and foreign restrictions on other branches of trade, have contributed to elevate this valuable part of our commerce; and the former will continue steadily to increase the importance of the coasting business. The vessels which take supplies of flour, and many other articles, from the middle and northern states to South-Carolina and Georgia, make very frequent voyages, and they return less than half laden: but if the planters should pursue the cultivation of hemp, flax, hops, and cotton, they may come back with full cargoes. A similar remark may be justly made in regard to the other states.

[1] *A View of the United States of America.* By Tench Coxe (Philadelphia, 1794), 340–1.

The fisheries would appear not to have recovered their former value; but it is plain, they have increased yearly since 1789: and they are even now more valuable than they appear to be. The consumption of oil, whale-bone, skins of sea animals, spermaceti, and pickled and dried fish, is much greater in the United States at this time, than it was twenty years ago. The outfits of the fishing vessels, too, are more from the industry and resources of the country, than was formerly the case. Wherefore the general benefits resulting from the fisheries are probably not less than before the revolution.

D. *Shipbuilding in the United States, 1783–1789*[1]

Phineas Bond was a Loyalist who went to England at the time of the Revolution, and was later appointed British Consul at Philadelphia, which post he filled for many years. The following extract is taken from a report to the foreign office of Britain in 1789. It will be noticed that he is very pessimistic as to the prospects of American shipping.

The account I transmit to your Grace (No. 31) of the number of ships now building is very accurate as to the 5 middle states which compose my district, what relates to other states I have collected from the opinions and observations of persons upon whom I could rely: — For a short time subsequent to the Peace, my Lord, shipbuilding went on rapidly in the Eastern and Middle States of America — but the restrictions upon the commerce of the country soon discouraged the merchants and the ship builders found themselves without employment. In Philad[a] where this business was carried on formerly to a prodigious extent, a very small proportion of the ship yards are even now occupied — and for a long time ships were so little in demand that some have been on the stocks 2 or 3 years without a purchaser — others were roofed in to secure them against the weather and in one instance a small vessel actually rotted upon the stocks: — the natural consequence of these discouragements was that the journeymen left or were dismissed from their employ and resorted to Nova Scotia and other parts of the King's dominions where they could earn their bread. The ship wrights for the most part became reduced and their stock of timber being once exhausted, they had no means of replacing it. — Within the last twelve months, my Lord, a combination of circumstances have prevailed to give some sort of relief to the artificers who were possessed of means to pursue

[1] *Letters of Phineas Bond.* In Annual Report of the American Historical Association (Washington, 1897), I, 638–9.

their trades: — The prospect of an efficient government — the scarcity in Europe — large crops in America — the actual want of vessels to carry off the produce of the last year, all operated favorably, the extension of the China trade also had its effect, and we may throw into the scale, the discrimination made by the late Federal impost laws (No. 1), by which a discount of 10% is allowed upon the duties on goods and merchandize imported in vessels owned by the citizens of America — All these matters have lately drawn forth some exertions in the matter of ship building — the number of vessels now on the stocks seem in a train of being brought forward as fast as the scanty resources of the ship builders and the reduced number of hands will admit, these are not soon or easily supplied so let the encouragement be what it may years must elapse before this useful employment will approach the conditions of profit and consequence it enjoyed antecedent to the war — nor is it at all improbable that a reduction of the prices of flour and wheat in Europe would at once check the present exertion and cause many of the vessels now on the stocks to be left dead weight upon the hands of the ship builders: — From all I have observed or can collect my opinion is that the general tonnage of the United States does not increase, but that the tonnage of New Hampshire, Mass. Bay, Pennsyl[a] and Maryland has of late advanced and is now advancing in some degree and that the advance is the effect of adventitious circumstances, which may or may not continue: — In short, my Lord whatever tends to encourage the commerce of the country, will enlarge the tonnage of the country and whatever has a contrary operation will produce a contrary effect.

E. *Comparative Cost of American and French Ships, 1791* [1]

Owing to the wealth of the forest resources, an American ship could be built for about $34 a ton, while both in England and on the continent, the cost was at least fifty per cent higher. Coxe was well qualified to speak on this subject, and his estimate may be accepted as correct.

The french-built ships cost from 55 to 60 dollars per ton, when fitted to receive a cargo, exclusively of sea stores, insurance, the charges of lading, outward pilotage, and other expenses incidental to the employment, and not to the building and outfit of a vessel. The american live oak and cedar ships, to which none are superior, cost in the same situation, from 33 to 35 dollars, finished very completely.

[1] *A View of the United States of America.* By Tench Coxe (Philadelphia, 1794), 184.

F. *Comparative Cost of Operation of American and English Vessels, 1805* [1]

Not merely in cost of construction, but also in cost of operation did an American vessel have the advantage over its foreign competitors. Under these circumstances, it is no wonder that the growth of the American merchant marine should have been so rapid as to have excited astonishment not only abroad but even in the United States itself. It is interesting to note that this estimate of comparative costs is furnished by an English authority.

COMPARISON OF COST OF OPERATION OF AN AMERICAN WITH THAT OF AN ENGLISH VESSEL, EACH OF 250 TONS, IN 1805

On a voyage between England and America and return

Cost of American Vessel of 250 tons, £2,000.
Cost of English Vessel of 250 tons, £4,000.
A ship of 250 tons would carry 3,000 bbls. of flour at 9s £1,350
The average freight from England back 600
£1,950

American charges	£	s.	d.	*English charges*	£	s.	d.
Insurance out & home on £2,500 at 4½%	95			Insurance out & home on £4,000 at 6%	360		
8 men, 5 months at £5	200			12 men, 5 months at £5	300		
Captain and mate at £10 each	100			Captain and mate at £10 each	100		
2400 lbs. bread at 16s	19	4		360 lbs. bread for 14 people for 5 months at 32s	57	12	
Beef, 10 bbls. at 32s	16			15 bbls. of beef at £4	60		
Pork, 10 bbls. at 50s	25			15 bbls. pork at 90s	67	10	
150 gallons rum	16	17		220 gallons rum at 5s	55		
Interest of £2000, 5 months	41	13	4	Interest on £4000 5 months	83	6	8
	513	14	4		1083	8	8

G. *Foreign Commerce, 1789–1807* [2]

One of the results of the Napoleonic wars was to divert the profitable carrying trade in part from the belligerent nations to the vessels of the only important neutral nation, the United States. The tonnage of American ships engaged in foreign trade increased greatly. But not only was an impetus given to our shipping; agriculture, the products of which were in growing demand in both Europe and England, also experienced a great stimulus and shared in the profits.

[1] *Report of the Committee of Correspondence on Trade with the East Indies and China.* British Parliamentary Papers, 1815. Quoted in *Merchant Venturers of Old Salem.* By R. E. Peabody (Boston, 1912), 151. Printed by permission of the author and the publishers, Houghton Mifflin Company.

[2] *Statistical Annals . . . of the United States.* By Adam Seybert (Philadelphia, 1818), 59–60.

Independent of our newly acquired political character, circumstances arose in Europe, by which a new and extensive field was presented for our commercial enterprize. The most memorable of revolutions was commenced in France, in 1789; the wars, consequent to that event, created a demand for our exports, and invited our shipping for the carrying trade of a very considerable portion of Europe; we not only carried the colonial productions to the several parent states, but we also became the purchasers of them in the French, Spanish and Dutch colonies. A new era was established in our commercial history; the individuals, who partook of these advantages, were numerous; our catalogue of merchants was swelled much beyond what it was entitled to be from the state of our population. Many persons, who had secured moderate capitals, from mechanical pursuits, soon became the most adventurous. [1] The predominant spirit of that time has had a powerful effect in determining the character of the rising generation in the United States. The brilliant prospects held out by commerce, caused our citizens to neglect the mechanical and manufacturing branches of industry; . . . so certain were the profits on the foreign voyages, that commerce was only pursued as an art; all the knowledge, which former experience had considered as essentially necessary, was now unattended to; the philosophy of commerce, if I am allowed the expression, was totally neglected; the nature of foreign productions was but little investigated by the shippers in the United States; the demand in Europe for foreign merchandise, especially for that of the West Indies and South America, secured to all these cargoes a ready sale, with a great profit. The most adventurous became the most wealthy, and that without the knowledge of any of the principles which govern commerce under ordinary circumstances. No one was limited to any one branch of trade; the same individual was concerned in voyages to Asia, South America, the West Indies and Europe. Our tonnage increased in a ratio, with the extended catalogue of the exports; we seemed to have arrived at the maximum of human prosperity; in proportion to our population we ranked as the most commercial nation; in point of value, our trade was only second to that of Great Britain.

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[1] We have no trading companies under the authority of the United States. The occupations here are voluntary; it is very common for persons to change their pursuits frequently; foreigners enjoy the same commercial privileges as the citizens of the United States, except, that *aliens* cannot, in the whole or in part, be the owners of American vesssels.

H. *Tonnage in Foreign and Coasting Trade, 1789–1815* [1]

The steady growth of the American merchant marine during the period under review "has no parallel," according to Pitkin, "in the commercial annals of the world." A great stimulus was given to our carrying trade and foreign commerce by the absorption of the European nations in the Napoleonic wars.

The following is the amount of tonnage from 1789 to 1815 inclusive, with its employment, in the foreign trade and coasting trade: —

Year	Foreign trade	Coasting trade
1789	123,893	68,607
1790	346,254	103,775
1791	363,110	106,494
1792	411,438	120,957
1793	367,734	114,853
1794	438,862	167,227
1795	529,470	164,795
1796	576,733	195,423
1797	597,777	214,077
1798	603,376	227,343
1799	669,197	220,904
1800	669,921	245,295
1801	718,549	246,255
1802	560,380	260,543
1803	597,157	268,676
1804	672,530	286,840
1805	749,341	301,366
1806	808,284	309,977
1807	848,306	318,189
1808	769,053	387,684
1809	910,059	371,500
1810	984,269	371,114
1811	708,852	386,258
1812	760,624	443,180
1813	674,853	433,404
1814	674,632	425,713
1815	854,294	435,066

V. Interference with Neutral Trade

A. *Growth of the Neutral Trade, 1791–1816* [2]

As the French navy was unable to protect her own merchant vessels, the French government opened her West Indian ports to American ships, which began to carry

[1] *A Statistical View of the Commerce of the United States of America.* By Timothy Pitkin (2d edition, New York, 1817), 425–9, *passim.*

[2] *A Statistical View of the Commerce of the United States of America.* By Timothy Pitkin (2d edition, New York, 1817), 36–7.

her colonial products to France. To this trade England objected, whereupon the American vessels trading with the West Indies touched first at an American port and took out new clearance papers before proceeding on their journey to France. The growth of this indirect carrying trade may be studied in the fourth column of the table.

The whole value of exports in each year, from 1790 to 1816, and the value of those of domestic and foreign origin, since 1803, was as follows: —

To Sept. 30	Total value of exports. Dolls.	Value of exports of domestic origin. Dolls.	Value of exports of foreign origin. Dolls.
1791	19,012,041	.....	.....
1792	20,753,098	.....	.....
1793	26,109,572	.....	.....
1794	33,026,233	.....	.....
1795	47,989,472	.....	.....
1796	67,064,097	.....	.....
1797	56,850,206	.....	.....
1798	61,527,097	.....	.....
1799	78,665,522	.....	.....
1800	70,971,780	.....	.....
1801	94,115,925	.....	.....
1802	72,483,160	.....	.....
1803	55,800,033	42,205,961	13,594,072
1804	77,699,074	41,467,477	36,231,597
1805	95,566,021	42,387,002	53,179,019
1806	101,536,963	41,253,727	60,283,236
1807	108,343,150	48,699,592	59,643,558
1808	22,430,960	9,433,546	12,997,414
1809	52,203,283	31,405,702	20,797,531
1810	66,757,970	42,366,675	24,391,295
1811	61,316,833	45,294,043	16,022,790
1812	38,527,236	30,032,109	8,495,127
1813	27,855,997	25,008,152	2,847,845
1814	6,927,441	6,782,272	145,169
1815	52,557,753	45,974,403	6,583,350
1816	81,920,452	64,781,896	17,138,555

B. *Frauds of the Neutral Flags, 1805* [1]

The evasion of the English prohibitions upon American trade between the French colonies and France aroused considerable bitterness in England and led

[1] *War in Disguise; or, the Frauds of the Neutral Flags.* By James Stephen (London, 1805), 40–121, *passim.*

eventually to the Orders in Council. The British case against America was forcibly stated by Stephen, an English barrister. His book excited a great deal of attention and was probably an important factor in leading to reprisals against our commerce by Great Britain.

From these causes it has naturally happened that the protection given by the American flag, to the intercourse between our European enemies and their colonies, since the instruction of January, 1794, has chiefly been in the way of a double voyage, in which America has been the half-way house, or central point of communication. The fabrics and commodities of France, Spain, and Holland, have been brought under American colours to ports in the United States; and from thence re-exported, under the same flag, for the supply of the hostile colonies. Again, the produce of those colonies has been brought, in a like manner, to the American ports, and from thence re-shipped to Europe. . . .

It seems scarcely necessary to shew, that, by this practice, the licence accorded by the British Government was grossly abused. . . .

By the merchants, and custom-house officers of the United States, the line of neutral duty in this case was evidently not misconceived; for the departures from it, were carefully concealed, by artful and fraudulent contrivance. When a ship arrived at one of their ports to neutralize a voyage that fell within the restriction, *e. g.* from a Spanish colony to Spain, all her papers were immediately sent on shore, or destroyed. Not one document was left, which could disclose the fact that her cargo had been taken in at a colonial port: and new bills of lading, invoices, clearances, and passports were put on board, all importing that it had been shipped in America. Nor were official certificates, or oaths wanting, to support the fallacious pretence. The fraudulent precaution of the agents often went so far, as to discharge all the officers and crew, and sometimes even the master, and to ship an entire new company in their stead, who, being ignorant of the former branch of the voyage, could, in case of examination or capture, support the new papers by their declarations and oaths, as far as their knowledge extended, with a safe conscience. Thus, the ship and cargo were sent to sea again, perhaps within eight and forty hours from the time of her arrival, in a condition to defy the scrutiny of any British cruizer, by which she should be stopped and examined in the course of her passage to Europe. . . .

. . . our prize courts . . . finding themselves to have been deceived for years past by fallacious evidence, have resolved to be cheated in the same way no longer. It is on this account only, and

the consequent capture of some American West Indiamen supposed to be practicing the old fraud, that we are accused of insulting the neutral powers, of innovating on the acknowledged law of nations, and of treating as contraband of war, the produce of the West India Islands. . . .

The worst consequence, perhaps, of the independence and growing commerce of America, is the seduction of our seamen. We hear continually of clamours in that country, on the score of its sailors being pressed at sea by our frigates. But when, and how, have these sailors become Americans? — By engaging in her merchant service during the last and the present war; and sometimes by obtaining that formal naturalization, which is gratuitously given, after they have sailed two years from an American port. If those who by birth, and by residence and employment, prior to 1793, were confessedly British, ought still to be regarded as his Majesty's subjects, a very considerable part of the navigators of American ships, are such at this moment; though, unfortunately, they are not easily distinguishable from genuine American seamen. . . .

It is truly vexatious to reflect, that, by this abdication of our belligerent rights, we not only give up the best means of annoying the enemy, but raise up, at the same time, a crowd of dangerous rivals for the seduction of our sailors, and put bribes into their hands for the purpose. We not only allow the trade of the hostile colonies to pass safely, in derision of our impotent warfare, but to be carried on by the mariners of Great Britain. This illegitimate and noxious navigation, therefore, is nourished with the life blood of our navy.

C. *British Orders in Council and French Decrees, 1803–1808* [1]

During the Napoleonic wars from 1793 to 1803 the carrying trade with Europe had fallen into the hands of the people of the United States, who were the only neutral nation of commercial importance. The profits from this trade, from ship-building, and from the production and exportation of foodstuffs, had been enormous. But, in their efforts to hurt each other, England and France interfered seriously with this trade and disregarded our rights as neutrals. The following report sums up briefly some of these injuries.

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[1] *Report of a Committee of the United States Senate on the Negotiations with Great Britain.* American State Papers, Series Foreign Relations (Washington, 1832), III, 220–219 *.

For memorials from the merchants of New York and Philadelphia in 1805, see *Ibid.*, II, 737–41; and for the documents of all the orders and decrees, see *Ibid.*, III, 262–94.

In Senate of the U. S., April 16, 1808.

Mr. Anderson, from the committee to whom was referred, on the 4th instant, the correspondence between Mr. Monroe and Mr. Canning, and between Mr. Madison and Mr. Rose, relative to the attack made upon the frigate Chesapeake by the British ship of war Leopard; and also the communications made to the Senate by the President of the United States, on the 30th day of March last, containing a letter from Mr. Erskine to the Secretary of State, and a letter from Mr. Champagny to General Armstrong, reported:

That, on a review of the several orders, decrees, and decisions of Great Britain and France, within the period of the existing war, it appears that, previous to the measures referred to in the letters from Mr. Erskine to the Secretary of State, and from Mr. Champagny to General Armstrong, various and heavy injuries have been committed against the neutral commerce and navigation of the United States under the following heads:

1st. The British order of June, 1803, unlawfully restricting the trade of the United States with a certain portion of the unblockaded ports of her enemies, and condemning vessels with innocent cargoes, on a return from ports where they had deposited contraband articles.

2d. The capture and condemnation, in the British courts of admiralty, of American property, on a pretended principle, debarring neutral nations from a trade with the enemies of Great Britain interdicted in time of peace. The injuries suffered by the citizens of the United States, on this head, arose, not from any public order of the British council, but from a variation in the principle upon which the courts of admiralty pronounced their decisions. These decisions have, indeed, again varied, without any new orders of council being issued; and in the higher courts of admiralty some of the decisions, which had formed the greatest cause for complaint, have been reversed, and the property restored. There still remains, however, a heavy claim of indemnity for confiscations which were made during the period of these unwarrantable decisions, and for which all negotiation has hitherto proved unavailing.

3d. Blockades notified to the minister of the United States at London, and thence made a ground of capture against the trade of the United States, in entire disregard of the law of nations, and even of the definition of legal blockades, laid down by the British

Government itself. Examples of these illegitimate blockades will be found in the notifications of the blockade of May 16, 1806, of the coast from the river Elbe to Brest, inclusive; blockade of 11th May, 1807, expounded 19th June, 1807, of the Elbe, Weser, and Ems, and the coast between the same; blockade 11th of May, 1807, of the Dardanelles and Smyrna; blockade of 8th January, 1808, of Carthagena, Cadiz, and St. Lucar, and of all the intermediate ports between Carthagena and St. Lucar, comprehending a much greater extent of coast than the whole British navy could blockade according to the established law of nations.

4th. To these injuries, immediately authorized by the British Government, might be added other spurious blockades by British naval commanders, particularly that of the island of Curacoa, which, for a very considerable period, was made a pretext for very extensive spoliations on the commerce of the United States.

5th. The British proclamation of October last, which makes it the duty of the British officers to impress from American merchant vessels all such of their crews as might be taken or mistaken for British subjects; those officers being the sole and absolute judges in the case.

For the decrees and acts of the French Government violating the maritime law of nations, in respect to the United States, the committee refer to the instances contained in the report of the Secretary of State, January 25, 1806, to the Senate, in one of which, viz: a decree of the French General Ferrand, at St. Domingo, are regulations sensibly affecting the neutral and commercial rights of the United States.

The French act, next in order of time, is the decree of November 21, 1806, declaring the British isles in a state of blockade, and professing to be a retaliation on antecedent proceedings of Great Britain, violating the law of nations.

This decree was followed, first, by the British order of January, 1807, professing to be a retaliation on that decree, and subjecting to capture the trade of the United States, from the port of one belligerent to a port of another; and, secondly, by the orders of November last, professing to be a further retaliation on the same decree, and prohibiting the commerce of neutrals with the enemies of Great Britain, as explained in the aforesaid letter of Mr. Erskine.

These last British orders again have been followed by the French decree of December 17, purporting to be a retaliation on the said orders, and to be put in force against the commerce of the United States, as stated in the aforesaid letter of Mr. Champagny.

The committee forbear to enter into a comparative view of these proceedings of the different belligerent Powers, deeming it sufficient to present the materials from which it may be formed. They think it their duty, nevertheless, to offer the following remarks, suggested by a collective view of the whole:

The injury and dangers resulting to the commerce of the United States from the course and increase of these belligerent measures, and from similar ones adopted by other nations, were such as first to induce the more circumspect of our merchants and ship-owners no longer to commit their property to the high seas, and at length to impose on Congress the indispensable duty of interposing some legislative provision for such an unexampled state of things.

Among other expedients, out of which a choice was to be made, may be reckoned —

1st. A protection of commerce by ships of war.
2d. A protection of it by self-armed vessels.
3d. A war of offence as well as of defence.
4th. A general suspension of foreign commerce.
5th. An embargo on our vessels, mariners, and merchandise.

This last was adopted, and the policy of it was enforced, at the particular moment, by accounts, quickly after confirmed, of the British orders of November, and by the probability that these would be followed, as has also happened by an invigorated spirit of retaliation in other belligerent Powers; the happy effect of the precaution is demonstrated by the well-known fact that the ports of Europe are crowded with captured vessels of the United States, unfortunately not within the reach of the precaution.

D. *Effect of the Embargo on New York City, 1807* [1]

As a peaceful mode of retaliation for the indignities and injuries received by American shipping at the hands of the French and English, Congress passed the embargo act, which prohibited American vessels leaving the ports of the United States for those of any foreign nation. The effect of the embargo upon our foreign trade and the industries contributory to it was immediate and disastrous. A graphic picture of conditions in New York City before and after the embargo is given by Lambert, an English traveler in the United States.

When I arrived at New York in November [1807], the port was filled with shipping, and the wharfs were crowded with commodities

[1] *Travels through Canada, and the United States of North America, in the Years 1806, 1807, & 1808.* By John Lambert (2d edition, London, 1814), II, 62–5, 294–5.

of every description. Bales of cotton, wool, and merchandize; barrels of pot-ash, rice, flour, and salt provisions; hogsheads of sugar, chests of tea, puncheons of rum, and pipes of wine; boxes, cases, packs and packages of all sizes and denominations, were strewed upon the wharfs and landing-places, or upon the decks of the shipping. All was noise and bustle. The carters were driving in every direction; and the sailors and labourers upon the wharfs, and on board the vessels, were moving their ponderous burthens from place to place. The merchants and their clerks were busily engaged in their counting-houses, or upon the piers. The Tontine coffee-house was filled with under-writers, brokers, merchants, traders, and politicians; selling, purchasing, trafficking, or insuring; some reading, others eagerly inquiring the news. The steps and balcony of the coffee-house were crowded with people bidding, or listening to the several auctioneers, who had elevated themselves upon a hogshead of sugar, a puncheon of rum, or a bale of cotton; and with Stentorian voices were exclaiming, "*Once, twice.*" "*Once, twice.*" "*Another cent.*" "*Thank ye, gentlemen,*" or were knocking down the goods, which took up one side of the street, to the best purchaser. The coffee-house slip, and the corners of Wall and Pearl-streets, were jammed up with carts, drays, and wheel-barrows; horses and men were huddled promiscuously together, leaving little or no room for passengers to pass. Such was the appearance of this part of the town when I arrived. Everything was in motion; all was life, bustle, and activity. The people were scampering in all directions to trade with each other, and to ship off their purchases for the European, Asian, African, and West Indian markets. Every thought, look, word, and action of the multitude seemed to be absorbed by commerce; the welkin rang with its busy hum, and all were eager in the pursuit of its riches.

But on my return to New York the following April, what a contrast was presented to my view! and how shall I describe the melancholy dejection that was painted upon the countenances of the people, who seemed to have taken leave of all their former gaiety and cheerfulness? The coffee-house slip, the wharfs and quays along South-street, presented no longer the bustle and activity that had prevailed there five months before. The port, indeed, was full of shipping; but they were dismantled and laid up. Their decks were cleared, their hatches fastened down, and scarcely a sailor was to be found on board. Not a box, bale, cask, barrel, or package, was to be seen upon the wharfs. Many of the counting-houses were shut

up, or advertised to be let; and the few solitary merchants, clerks, porters, and labourers, that were to be seen, were walking about with their hands in their pockets. Instead of sixty or a hundred carts that used to stand in the street for hire, scarcely a dozen appeared, and they were unemployed; a few coasting sloops, and schooners, which were clearing out for some of the ports in the United States, were all that remained of that immense business which was carried on a few months before. The coffee-house was almost empty; or, if there happened to be a few people in it, it was merely to pass away the time which hung heavy on their hands, or to enquire anxiously after news from Europe, and from Washington: or perhaps to purchase a few bills, that were selling at ten or twelve per cent. above par. In fact, every thing presented a melancholy appearance. The streets near the water-side were almost deserted, the *grass had begun to grow* upon the wharfs, and the minds of the people were tortured by the vague and idle rumours that were set afloat upon the arrival of every letter from England or from the seat of government. In short, the scene was so gloomy and forlorn, that had it been the month of September instead of April, I should verily have thought that a malignant fever was raging in the place; so desolating were the effects of the embargo, which in the short space of five months had deprived the first commercial city in the States of all its life, bustle, and activity; caused above one hundred and twenty bankruptcies; and completely annihilated its foreign commerce! . . .

(April 13) Everything wore a dismal aspect at New York. The embargo had now continued upwards of three months, and the salutary check which Congress imagined it would have upon the conduct of the belligerent powers was extremely doubtful, while the ruination of the commerce of the United States appeared certain, if such destructive measure was persisted in. Already had 120 failures taken place among the merchants and traders, to the amount of more than 5,000,000 dollars; and there were above 500 vessels in the harbour, which were lying up useless, and rotting for want of employment. Thousands of sailors were either destitute of bread, wandering about the country, or had entered into the British service. The merchants had shut up their counting-houses, and discharged their clerks, and the farmers refrained from cultivating their land; for if they brought their produce to market, they either could not sell at all, or were obliged to dispose of it for only a fourth of its value.

E. *War of 1812* [1]

The policy of remonstrance, of a domestic embargo, and of non-intercourse with England proving ineffective in securing a redress of American grievances, war was finally decided upon. The tone of the following report shows the high temper to which the people had been aroused.

Mr. Calhoun, from the Committee on Foreign Relations, to whom was referred the message of the President of the United States of the 1st of June, 1812, made the following report:

That, after the experience which the United States have had of the great injustice of the British Government towards them, exemplified by so many acts of violence and oppression, it will be more difficult to justify to the impartial world their patient forbearance than the measures to which it has become necessary to resort, to avenge the wrongs, and vindicate the rights and honor of the nation. Your committee are happy to observe, on a dispassionate review of the conduct of the United States, that they see in it no cause for censure. . . .

More than seven years have elapsed since the commencement of this system of hostile aggression by the British Government on the rights and interests of the United States. The manner of its commencement was not less hostile than the spirit with which it has been prosecuted. The United States have invariably done every thing in their power to preserve the relations of friendship with Great Britain. . . .

From this review of the multiplied wrongs of the British Government since the commencement of the present war, it must be evident to the impartial world that the contest which is now forced on the United States is radically a contest for their sovereignty and independence. Your committee will not enlarge on any of the injuries, however great, which have had a transitory effect. They wish to call the attention of the House to those of a permanent nature only, which intrench so deeply on our most important rights, and wound so extensively and vitally our best interests, as could not fail to deprive the United States of the principal advantages of their resolution, if submitted to. The control of our commerce by Great Britain, in regulating at pleasure, and expelling it almost from the ocean; the oppressive manner in which these regulations have been carried into effect, by seizing and confiscating such of our vessels, with their

[1] *Report of the House Committee on Foreign Relations.* American State Papers. Foreign Relations (Washington, 1832), III, 567, 570.

cargoes, as were said to have violated her edicts, often without previous warning of their danger; the impressment of our citizens from on board our own vessels, on the high seas, and elsewhere, and holding them in bondage till it suited the convenience of their oppressors to deliver them up, are encroachments of that high and dangerous tendency, which could not fail to produce that pernicious effect; nor would those be the only consequences that would result from it. The British Government might, for a while, be satisfied with the ascendency thus gained over us, but its pretensions would soon increase. The proof which so complete and disgraceful a submission to its authority would afford of our degeneracy, could not fail to inspire confidence that there was no limit to which its usurpations and our degradations might not be carried. Your committee believing that the freeborn sons of America are worthy to enjoy the liberty which their fathers purchased at the price of so much blood and treasure, and seeing in the measures adopted by Great Britain a course commenced and persisted in which must lead to a loss of national character and independence, feel no hesitation in advising resistance by force, in which the Americans of the present day will prove to the enemy and to the world, that we have not only inherited that liberty which our fathers gave us, but also the will and power to maintain it. Relying on the patriotism of the nation, and confidently trusting that the Lord of Hosts will go with us to battle in a righteous cause, and crown our efforts with success, your committee recommend an immediate appeal to arms.

CHAPTER VII

AGRICULTURE, SLAVERY, AND INTERNAL TRADE 1783–1808

I. Agriculture in the North

A. *Effect of the Revolution on Agriculture, 1783–1789* [1]

The disorganizing effect of the war of the Revolution upon agriculture is here pictured, and also the difficulty of improvements.

As to the 5th article of inquiry contained in your Grace's letter from the observation I have myself made and from every information I can collect, the agriculture of the Middle and Southern States is certainly increasing at this time; tho' I do not conceive it has yet reached its level antecedent to the war.

During the troubles my Lord a number of useful labourers were taken from the pursuits of agriculture and employed as soldiers; — the diminution of useful labor occasioned a diminution of the crops and the farmers sustained a heavy loss thereby — but a very considerable discouragement to agriculture existed during the war, the intercourse with Europe and the W. Indies was so frequently obstructed by the cruizers that the farmer found no certain vent for his produce and fearful that the little he raised might perish on his hands he looked scarcely further than to the nurture of his family and became careless of cultivating more than their wants required: — many farmers too quitted their homes and engaged in military pursuits: this course of life promoted dissipation and inspired sentiments very incompatible with the humility of agricultural life: — Men who had commanded in the field could not suddenly brook a return to their former stations — the ruinous consequences of supineness dissipation and luxury were soon severely felt; numbers became involved in debt — their farms were impoverished and their farm houses fell into decay, so that upon the accession of peace those means which were

[1] *Letters of Phineas Bond.* In Annual Report of the American Historical Association (Washington, 1897), I, 628–9.

formerly exerted for the purposes of tillage and improvement were appropriated to the discharge of old debts. (which had accumulated to a fearful size) and to the payment of taxes far exceeding those of former times. — These inconveniences are gradually wearing away — the eyes of the people seem now to be opened to their true interests — the prospect of an efficient government has greatly encouraged them, industry has succeeded to idleness and husbandry appears to be in a progressive state — the crop of the last harvest was uncommonly great, the exports of the present year from this port and from New York, it is supposed will be equal to those of any former years whatever, tho' perhaps upon an average calculation for several years to come it would not be found that the produce of this state at this rate of computation nearly equals what it was before the war.

B. *Agriculture in the United States, 1792* [1]

Agriculture had probably reached its lowest ebb in the United States in the period after the Revolution. Coxe here gives a very pessimistic account of the conditions then existing.

The most important of all the employments of our citizens, that of *the farmer*, remains to be noticed. It is very much to be feared, that, in point of execution, a candid examination would prove this best of pursuits, to be most imperfectly conducted. The proofs are, innumerable instances of impoverished lands; precious bodies of meadow lands, in the old settlements of some of the states, which remain in a state of nature; a frequent inattention to the making or preserving of manure; as frequent inattention to the condition of the seed grain, evidenced by the growth of inferior grain in fields of wheat, and by the complexion of the flour in some quarters; the bad condition of *barns*, stables, and fences, and in some places the total want of the former; the deficiency of spring-houses or other cool dairies, in extensive tracts of country; the want of a trifling stock of bees; the frequent want of orchards, and the neglect of those which have been planted by preceding occupants; the neglect of the sugar-tree; the neglect of fallen timber and fuel, accompanied with the extravagant felling of timber trees for fuel; the neglect of household manufactures in many families; the neglect of making pot-ash: the non-use of oxen; and above all, the growth in substance of large bodies of farmers on lands of an ordinary quality, while the inhabit-

[1] *A View of the United States of America.* By Tench Coxe (Philadelphia, 1794), 358–9.

ants of extensive scenes hardly extract, from much superior lands, sustenance and clothing.

It is a fact very painful to observe and unpleasant to represent, but it is indubitably true, that *farming*, in the grain states, their great best business, the employment most precious in free governments, is, too generally speaking, the least understood, or the least economically and attentively pursued, of any of the occupations which engage the citizens of the United States. It is acknowledged, however, with satisfaction, that great changes have been lately made; and that the energy, spirit of improvement, and economy, which have been recently displayed, promise the regular and rapid melioration of the agricultural system. All other things have taken a course of great improvement: and it cannot be apprehended, that the yeomanry of the United States will permit themselves to be exceeded by any of their brethren, in the most valuable characteristic of good citizens — *usefulness in their proper sphere.*

II. Agriculture in the South

A. *Agriculture in Virginia, 1787* [1]

George Washington was deeply interested in the promotion of scientific agriculture in the United States, and corresponded with some of the leading men in England on this subject. Arthur Young, to whom this letter was addressed, was probably the foremost authority in England on the subject of agriculture and wrote voluminously on this topic. Washington introduced a plan of scientific rotation of crops on his own estate instead of the exhaustive practice of continuous tobacco growing.

Mount Vernon, 1 November, 1787.

. . . Before I undertake to give the information you request, respecting the arrangements of the farms in this neighborhood, &c., I must observe that there is, perhaps, scarcely any part of America, where farming has been less attended to than in this State. The cultivation of tobacco has been almost the sole object with men of landed property, and consequently a regular course of crops have never been in view. The general custom has been, first to raise a crop of Indian corn (maize) which according to the mode of cultivation, is a good preparation for wheat; then a crop of wheat; after which the ground is respited (except from weeds, and every trash that can contribute

[1] *Letters to Arthur Young, England, containing an account of his husbandry with a map of his Farm, his Opinions on Various Questions in Agriculture and many Particulars of the Rural Economy of the United States.* By George Washington (London, 1801). Also in Writings (Ford edition, New York, 1891), XI, 178–180.

to its foulness) for about eighteen months; and so on, alternately, without any dressing, till the land is exhausted; when it is turned out, without being sown with grass-seeds, or any method taken to restore it; and another piece is ruined in the same manner. No more cattle is raised than can be supported by lowland meadows, swamps, &c., and the tops and blades of Indian corn; as very few persons have attended to sowing grasses, and connecting cattle with their crops. The Indian corn is the chief support of the labourers and horses. Our lands, as I mentioned in my first letter to you, were originally very good; but use, and abuse, have made them quite otherwise.

The above is the mode of cultivation which has been generally pursued here, but the system of husbandry which has been found so beneficial in England, and which must be greatly promoted by your valuable annals, is now gaining ground. There are several (among which I may class myself), who are endeavoring to get into your regular and systematic course of cropping, as fast as the nature of the business will admit; so that I hope in the course of a few years, we shall make a more respectable figure as farmers, than we have hitherto done.

B. *Farming in Maryland and Virginia, 1788* [1]

In the states of Maryland and Virginia, where steady cultivation of tobacco had exhausted the land, agriculture was at a very low ebb during the second half of the 18th century. Some of the more progressive farmers were beginning to follow more diversified farming instead of growing tobacco, but the majority did not have the knowledge or the energy to alter traditional practices.

Cotton is cultivated in Maryland, as in Virginia; but little care is taken to perfect either its culture or its manufacture. You see excellent lands in these two states; but they have very few good meadows, though these might be made in abundance. For want of attention and labour, the inhabitants make but little hay; and what they have is not good. They likewise neglect the cultivation of potatoes, carrots, and turnips for their cattle, of which their neighbors of the north make great use. Their cattle are left without shelter in winter, and nourished with the tops of Indian corn. Of consequence many of them die with cold and hunger; and those that survive the winter, are miserably meagre. . . .

Nothing but a great crop, and the total abnegation of every comfort, to which the negroes are condemned, can compensate the

[1] *New Travels in the United States of America, performed in 1788.* By J. P. Brissot de Warville (Dublin, 1792), 432, 436.

expenses attending this production [of tobacco] before it arrives at the market. Thus in proportion as the good lands are exhausted, and by the propagating of the principles of humanity, less hard labour is required of the slaves, this culture must decline. And thus you see already in Virginia fields enclosed, and meadows succeed to tobacco. Such is the system of the proprietors who best understand their interest; among whom I place General Washington, who has lately renounced the culture of this plant.

C. *Care of Live Stock, 1794*[1]

If the energies of Washington had not been so thoroughly absorbed in military and political services to his country, he would have ranked high as a progressive and scientific farmer. Among the men with whom he corresponded on agricultural subjects and whose advice he sought was Sir John Sinclair, who was the first president of the English Board of Agriculture.

PHILADELPHIA, 20 July, 1794.

Sir:

I am indebted to you for your several favours, of the 15th of August and 4 of September of the last, and for that of the 6th of February in the present year; for which, and the pamphlets accompanying them, my thanks are particularly due. . . .

Our domestic animals (as well as our agriculture) are inferior to yours in point of size, but this does not proceed from any defect in the stamina of them; but to deficient care in providing for their support; experience having abundantly evidenced that where our pastures are as well improved as the soil and climate will admit,— where a competent store of wholesome provender is laid up, and proper care used in serving it — that our horses, black cattle, sheep, &c.— are not inferior to the best of their respective kinds that have been imported from England. Nor is the wool of our sheep inferior to that of the common sort with you.— As a proof — after the peace of Paris in 1783, and my return to the occupation of a farmer, I paid particular attention to my breed of sheep (of which I usually kept about seven or eight hundred). By this attention, at the shearing of 1789, the fleeces yielded me the average quantity of $5\frac{1}{4}$ of wool — a fleece of which promiscuously taken, I sent to Mr. Arthur Young, who put it for examination into the hands of manufacturers. They

[1] *Letters to Sir John Sinclair on Agriculture and other interesting topics.* By George Washington (London, 1801). Also in Writings (Ford edition, New York, 1891), XII, 440–4.

pronounced it to be equal in quality to the Kentish wool. In the same year (*i. e.* 1789) I was again called from my home, and have not had it in my power since to pay any attention to my farms. The consequence of which is, that my sheep at the last shearing, yielded me not more than $2\frac{1}{2}$.

This is not a single instance of the difference between care and neglect. Nor is the difference between good and bad management confined to that species of stock, for we find that good pastures and proper attention can, and does fill our markets with beef of seven, eight, and more hundredweight the four quarters; whereas from 450 to 500 (especially in the States south of this, where less attention hitherto has been paid to grass) may be found about the average weight.— In this market some bullocks were killed in the months of March and April last, the weights of which as taken from the accounts which were published at the time, you will find in a paper enclosed. These were pampered steers, but from 800 to 1000, the four quarters, is no uncommon weight.

D. *History of Cotton Growing, 1775–1795* [1]

The inventions of Hargreaves, Arkwright, Crompton, and Cartwright in England between 1770 and 1785, which revolutionized the cotton industry, created an immense demand for cotton, but until the invention of the cotton gin, little cotton was grown for export in this country. Ramsay wrote his History in 1808, though it was not published until fifty years later.

. . . The first Provincial Congress in South Carolina, held in January, 1775, recommended to the inhabitants "to raise cotton," yet very little practical attention was paid to their recommendation. A small quantity only was raised for domestic manufactures. This neglect cannot solely be referred to the confusion of the times, for agriculture had been successfully prosecuted for ten years after the termination of the Revolutionary war before the Carolinians began to cultivate it to any considerable extent.[2] In this culture the Georgians took the lead. They began to raise it as an article of export soon after the peace of 1783. Their success recommended it to their

[1] *History of South Carolina.* By David Ramsay (Newberry, S. C., 1858), II, 120–1.

[2] The labor-saving machines invented in England within the last thirty-five years, greatly promoted the manufacture of cotton, and thereby opened a steady and advantageous market for the raw materials. This was one of the principal causes which encouraged its cultivation in the United States.

neighbors. The whole quantity exported from Carolina in any one year prior to 1795 was inconsiderable, but in that year it amounted to £1,109,653.[1] The cultivation of it has been ever since increasing, and on the first year of the present century eight million of pounds were exported from South Carolina. . . .

The cotton chiefly cultivated on the sea-coast is denominated the black seed or long staple cotton, which is of the best quality and admirably adapted to the finest manufactures. The wool is easily separated from the seed by roller-gins which do not injure the staple. A pair of rollers worked by one laborer give about twenty-five pounds of clean cotton daily. The cotton universally cultivated in the middle and upper country is called the green seed kind. It is less silky and more wooly, and adheres so tenaciously to the seed that it requires the action of a saw-gin to separate the wool from the seed. This cuts the staple exceedingly; but as the staple of this kind of cotton is not fit for the finer fabrics it is not considered injurious. The quality of these two kinds is very different. The wool of the green seed is considerably the cheapest; but that species is much more productive than the other. An acre of good cotton land will usually produce one hundred and fifty pounds of clean wool of the long staple kind. An acre of land of equal quality will usually produce two hundred pounds of the green seed or short staple kind. Besides these, yellow or nankeen cotton is also cultivated in the upper country for domestic use. Two ingenious artists, Miller and Whiteney of Connecticut, invented a saw-gin for the separation of the wool from the seed which has facilitated that operation in the highest degree. The Legislature of South Carolina purchased their patent-right for 50,000 dollars, and then munificently threw open its use and benefits to all its citizens.

E. *Invention of the Cotton Gin, 1793*[2]

The work of separating the seeds from the lint of the cotton was at first done by hand. But this was a very tedious and slow process. Whitney wrote that he had never seen anyone who claimed that he could clean as much as one pound a day in this way. At this rate it would take almost two years for one person to clean a bale of cotton. The importance of Whitney's invention becomes evident when we learn that it would clean 300 pounds of cotton in a day.

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[1] The author evidently means pounds avoirdupois. — Ed.

[2] *Correspondence of Eli Whitney.* In American Historical Review (New York, 1898), III, 99–101.

New Haven, Sept. 11th, 1793.

Dear Parent, — I received your letter of the 16th of August with peculiar satisfaction and delight. It gave me no small pleasure to hear of your health and was very happy to be informed that your health and that of the family has been so good since I saw you. I have fortunately just heard from you by Mr. Robbinson who says you were well when he left Westboro. When I wrote you last I expected to have been able to come to Westboro' sooner than I now fear will be in my power. I presume, sir, you are desirous to hear how I have spent my time since I left College. This I conceive you have a right to know and that it is my duty to inform you and should have done it before this time; but I thought I could do it better by verbal communication than by writing, and expecting to see you soon, I omitted it. As I now have a safe and direct opportunity to send by Mr. Robbinson, I will give you a sumary account of my southern expedition.

I went from N. York with the family of the late Major General Greene to Georgia. I went immediately with the family to their Plantation about twelve miles from Savannah with an expectation of spending four or five days and then proceed into Carolina to take the school as I have mentioned in former letters. During this time I heard much said of the extreme difficulty of ginning Cotton, that is, seperating it from its seeds. There were a number of very respectable Gentlemen at Mrs. Greene's who all agreed that if a machine could be invented which would clean the cotton with expedition, it would be a great thing both to the Country and to the inventor. I involuntarily happened to be thinking on the subject and struck out a plan of a Machine in my mind, which I communicated to Miller, (who is agent to the Executors of Genl. Greene and resides in the family, a man of respectibility and property) he was pleased with the Plan and said if I would pursue it and try an experiment to see if it would answer, he would be at the whole expense, I should loose nothing but my time, and if I succeeded we would share the profits. Previous to this I found I was like to be disappointed in my school, that is, instead of a hundred, I found I could get only fifty Guineas a year. I however held the refusal of the school untill I tried some experiments. In about ten Days I made a little model, for which I was offered, if I would give up all right and title to it, a Hundred Guineas. I concluded to relinquish my school and turn my attention to perfecting the Machine. I made one before I came away which required the labor of one man to turn it and with which one man will clean ten times as

much cotton as he can in any other way before known and also cleanse it much better than in the usual mode.[1] This machine may be turned by water or with a horse, with the greatest ease, and one man and a horse will do more than fifty men with the old machines. It makes the labor fifty times less, without throwing any class of People out of business.

I returned to the Northward for the purpose of having a machine made on a large scale and obtaining a Patent for the invintion. . . . How advantageous this business will eventually prove to me, I cannot say. It is generally said by those who know anything about it, that I shall make a Fortune by it. I have no expectation that I shall make an independent fortune by it, but think I had better pursue it than any other business into which I can enter. Something which cannot be foreseen may frustrate my expectations and defeat my Plan; but I am now so sure of success that ten thousand dollars, if I saw the money counted out to me, would not tempt me to give up my right and relinquish the object. I wish you, sir, not to show this letter nor communicate anything of its contents to any body except My Brothers and Sister, *enjoining* it on them to keep the whole a *profound secret*. . . .

With respects to Mama[2] I am,
kind Parent, your most obt. Son
Eli Whitney, Junr.

Mr. Eli Whitney.

F. *Effect of the Cotton Gin upon Export of Cotton, 1791–1811*[3].

As soon as it became possible to clean cotton quickly and cheaply, a rapidly growing export trade sprang up, most of it with England.

In 1790, the growth of American cotton wool was problematical. The extent to which the production of this raw material has been subsequently carried, enriched the nation, and very much contributed to lessen the demand for slaves. Prior to 1790, the Dutch settlements in Surinam, and other parts of the West Indies, were considered as the countries, from which the manufactories in the

[1] In a letter to Jefferson, dated Nov. 24, 1793, Whitney stated that with this machine "it is the stated task of one negro to clean fifty weight (I mean fifty pounds after it is seperated from the seed), of the green seed cotton per day." Olmsted, *Memoir of Eli Whitney, Esq.*, p. 17.

[2] Eli Whitney's step-mother. His own mother died while he was still a young lad.

[3] *Statistical Annals . . . of the United States of America.* By Adam Seybert (Philadelphia, 1818), 92.

United States might be supplied with cotton wool. In 1791, the first parcel of cotton, of American growth, was exported from the United States, and amounted only to 19,200 lbs.! The cotton wool of the growth of the United States, exported in 1809–10, amounted to 93,361,462 lbs.; besides, in that year, it has been estimated that 16,000,000 lbs. were consumed in our manufactories. Calculated on the average of the six years, from 1806 to 1811, there was annually imported into Great Britain from the United States, 34,568,487 lbs.[1] and in 1811, 46,872,432 lbs. Calculated on the average of the five years, from 1805 to 1809, there was annually imported into Great Britain from all parts of the world, 69,181,885 lbs.[2] In 1755, the cotton manufacture, in England, was ranked "amongst the humblest of the domestic arts;" the products of this branch, were then almost entirely for home consumption; in 1797, it took the lead of all the other manufactures in Great Britain, and in 1809, gave employment to 800,000 persons, and its annual value was estimated at £30,000,000 sterling, or 132,000,000 dollars!

G. *Agriculture in the Carolinas and Georgia, 1802* [3]

The decline in the profitableness of indigo and tobacco had brought the agriculture of this section into a transitional period of its development. If the cotton gin had not been invented they might have developed mixed farming. As it was, however, South Carolina and Georgia turned eagerly to this new crop, and in 1801 produced three quarters of all that was grown in the United States, the remainder coming from North Carolina and Virginia. In South Carolina, rice was still cultivated, though not so generally.

The two Carolinas and Georgia are naturally divided into the upper and lower countries, but the upper embraces a greater extent. . . .

Through the whole of the country the nature of the soil is adapted for the growth of wheat, rye, and Indian corn. Good land produces upward of twenty bushels of Indian wheat per acre, which is commonly worth about half a dollar per bushel. A general consumption is made of it for the support of the inhabitants since, except those who are of German origin, there are very few, as we have before remarked, that make use of wheaten bread. The growth of corn is very cir-

[1] *Naval Chronicle*, for 1811, p. 281.

[2] *Monthly Magazine*, vol. xxx, p. 115. In 1705, only 1,170,881 lbs. of cotton wool were imported into England. In 1810, Sir Robert Peel stated, in the House of Commons, that 135,000,000 lbs. had been imported that year!

[3] *Travels to the Westward of the Allegany Mountains*. By F. A. Michaux (London, 1805), 278, 288.

cumscribed, and the small quantity of flour that is exported to Charleston and Savannah is sold fifteen per cent. cheaper than that imported from Philadelphia.

The low price to which tobacco is fallen in Europe within these few years, has made them give up the culture of it in this part of the country. That of green-sea cotton has resumed its place, to the great advantage of the inhabitants, many of whom have since made their fortunes by it. The separation of the seed from the felt that envelops them is a tedious operation, and which requires many hands, is now simplified by a machine for which the inventor has obtained a patent from the federal government. . . .

The best rice plantations are established in the great swamps, that favour the watering of them when convenient. The harvests are abundant there, and the rice that proceeds from them, stripped of its husk, is larger, more transparent, and is sold dearer than that which is in a drier soil, where they have not the means or facility of irrigation. The culture of rice in the southern and maritime part of the United States has greatly diminished within these few years; it has been in a great measure replaced by that of cotton, which affords greater profit to the planters, since they compute a good cotton harvest equivalent to two of rice. The result is, that many rice fields have been transformed into those of cotton, avoiding as much as possible the water penetrating.

III. Slavery

A. *Poor Whites and Slaves in Virginia, 1780* [1]

The position of the poor white, in a community where most of the labor was performed by negro slaves, was a difficult one, and the problem to which it gave rise became more important in a later period. But even at this earlier date, his lot in a state like Virginia could arouse the attention of an intelligent and sympathetic observer like Chastellux. This writer was a French officer who served in the Revolution.

. . . But if Reason ought to blush at beholding such prejudices so strongly established amongst a new people, Humanity has still more to suffer from the state of poverty, in which a great number of white people lives in Virginia. It is in this country that I saw poor persons, for the first time, after I passed the sea; for, in the midst of those rich plantations, where the negro alone is wretched, miserable huts are often to be met with, inhabited by whites, whose wane looks,

[1] *Travels in North America, in the Years 1780, 1781, and 1782.* By the Marquis [F. J.] Chastellux (London, 1787), 190–9.

and ragged garments, bespeak poverty. At first I was puzzled to explain to myself, how, in a country where there is still so much land to clear, men who do not refuse to work should remain in misery; but I have since learned, that all these useless territories, these immense estates, with which Virginia is covered, have their proprietors. Nothing is more common than to see some of them possessing five or six thousand acres of land, who clear out only as much as their negroes can cultivate; yet will they not give, or even sell the smallest portion of them, because they form a part of their possessions, and they are in hopes of one day augmenting the number of their negroes. These white men, without fortune, and frequently without industry, are straitened, therefore, on every side, and reduced to the small number of acres they are able to acquire. Now, the land not being good in general in America, especially in Virginia, a considerable number of them is necessary, in order to clear it with success, because they are the cattle from which the cultivator derives his aid and his subsistence. To the eastward are a great number of cleared grounds, but the portions of land which are easily purchased there, and for almost nothing, consist always of at least two hundred acres; besides, that to the southward, the climate is less healthy, and the new settlers, without partaking of the wealth of Virginia, share all the inconveniences of the climate, and even the indolence it inspires.

Beneath this class of inhabitants we must place the negroes, whose situation would be still more lamentable, did not their natural insensibility extenuate, in some degree, the sufferings annexed to slavery. On seeing them ill-lodged, ill-cloathed, and often oppressed with labour, I concluded that their treatment was as rigorous as elsewhere. I have been assured, however, that it is extremely mild, in comparison with what they suffer in the sugar colonies; . . .

I must likewise do the Virginians the justice to declare, that many of them treat their negroes with great humanity. I must add, likewise, a still more honourable testimony, that in general they seem afflicted to have any slavery, and are constantly talking of abolishing it, and of contriving some other means of cultivating their estates. It is true that this opinion, which is almost generally received, is inspired by different motives. The philosophers, and the young men, who are almost all educated in the principles of a sound philosophy, regard nothing but justice and the rights of humanity. The fathers of families, and such as are principally occupied with schemes of interest, complain that the maintenance of their negroes is very expensive; that their labour is neither so productive nor so

cheap, as that of day labourers, or white servants; and, lastly, that epidemical disorders, which are very common, render both their property and their revenue extremely precarious.

B. *Decline of Slavery, 1788*[1]

Owing to the impossibility of employing slave labor in the staple industries of the north, slavery was gradually dying out in that section. Even in the south, with the decline in the profitableness of tobacco, there was a growing movement in favor of abolition. Brissot's liberal philosophy and horror of the institution of slavery led him at times into doubtful generalizations.

Three distinct epochs mark the conduct of the Americans in this business — the prohibition of the importation of slaves — their manumission — and the provision made for their instruction. All the different States are not equally advanced in these three objects.

In the Northern and Middle States, they have proscribed for ever the importation of slaves; in others, this prohibition is limited to a certain time. In South Carolina, where it was limited to three years, it has lately been extended to three years more. Georgia is the only State that continues to receive transported slaves. . . .

Slavery, my friend, has never polluted every part of the United States. There was never any law in New Hampshire, or Massachusetts, which authorized it. When, therefore, those States proscribed it, they only declared the law as it existed before. There was very little of it in Connecticut; the puritanic austerity which predominated in that colony, could scarcely reconcile itself with slavery. Agriculture was better performed there by the hands of freemen; and everything concurred to engage the people to give liberty to the slaves: — so that almost everyone has freed them; and the children of such as are not yet free, are to have their liberty at twenty-five years of age.

The case of the Blacks in New-York is nearly the same; yet the slaves there are more numerous.

It is because the basis of the population there is Dutch; that is to say, people less disposed than any other to part with their property. But liberty is assured there to all the children of the slaves, at a certain age. The State of Rhode-Island formerly made a great business of the slave trade. It is now totally and for ever prohibited.

In New Jersey the bulk of the population is Dutch. You find there, traces of that same Dutch spirit which I have described. Yet

[1] *New Travels in the United States of America, performed in 1788.* By J. P. Brissot de Warville (Dublin, 1792), 270–81, *passim.*

the Western parts of the State are disposed to free their Negroes; but the Eastern part are opposed to it. . . .

[In Pennsylvania in 1780] the General Assembly abolished slavery for ever, forced the owners of slaves to cause them to be enregistered, declared their children free at the age of twenty-eight years, placed them, while under that age, on a footing of hired servants, assured to them the benefit of trial by jury, &c. . . .

The little State of Delaware has followed the example of Pennsylvania. It is mostly peopled by Quakers — instances of giving freedom are therefore numerous. . . .

With the State of Delaware finishes the system of protection to the blacks. Yet there are some negroes freed in Maryland, because there are some Quakers there; and you perceive it very readily, on comparing the fields of tobacco or of Indian corn belonging to these people with those of others; you see how much superior the hand of a freeman is to that of a slave in the operations of industry.

When you run over Maryland and Virginia, you conceive yourself in a different world; and you are convinced of it when you converse with the inhabitants. They speak not here of projects for freeing the negroes; they praise not the societies of London and America; they read not the works of Clarkson — No, the indolent masters behold with uneasiness, the efforts that are making to render freedom universal. The Virginians are persuaded of the impossibility of cultivating tobacco without slavery; they fear, that if the Blacks become free, they will cause trouble; on rendering them free, they know not what rank to assign them in society; whether they shall establish them in a separate district, or send them out of the country. These are the objections which you will hear repeated every where against the idea of freeing them.

C. *Slavery in the South, 1795* [1]

A rather favorable view of slavery is given by Weld, in spite of his dislike of the institution. In view of the internal slave trade which sprang up shortly after this date between the exhausted tobacco plantations and the new cotton districts, his statement that the former were overstocked with slaves is significant.

The principal planters in Virginia have nearly everything they can want on their own estates. Amongst their slaves are found taylors, shoemakers, carpenters, smiths, turners, wheelwrights,

[1] *Travels through the States of North America, and the Provinces of Upper and Lower Canada, during the Years 1795, 1796, and 1797.* By Isaac Weld, Junior (London, 1800), 114–6.

weavers, tanners, &c. I have seen patterns of excellent coarse woollen cloth made in the country by slaves, and a variety of cotton manufactures, amongst the rest good nankeen. Cotton grows here extremely well; the plants are often killed by frost in winter, but they always produce abundantly the first year in which they are sown. The cotton from which nankeen is made is of a particular kind, naturally of a yellowish colour.

The large estates are managed by stewards and overseers, the proprietors just amusing themselves with seeing what is going forward. The work is done wholly by slaves, whose numbers are in this part of the country more than double that of white persons. The slaves on the large plantations are in general very well provided for, and treated with mildness. During three months nearly, that I was in Virginia, but two or three instances of ill treatment towards them came under my observation. Their quarters, the name whereby their habitations are called, are usually situated one or two hundred yards from the dwelling house, which gives the appearance of a village to the residence of every planter in Virginia; when the estate, however, is so large as to be divided into several farms, then separate quarters are attached to the house of the overseer on each farm. Adjoining their little habitations, the slaves commonly have small gardens and yards for poultry, which are all their own property; they have ample time to attend to their own concerns, and their gardens are generally found well stocked, and their flocks of poultry numerous. Besides the food they raise for themselves, they are allowed liberal rations of salted pork and Indian corn. Many of their little huts are comfortably furnished, and they are themselves, in general, extremely well clothed. In short, their condition is by no means so wretched as might be imagined. They are forced to work certain hours in the day; but in return they are clothed, dieted, and lodged comfortably, and saved all anxiety about provision for their offspring. . . .

The number of the slaves increases most rapidly, so that there is scarcely any estate but what is overstocked. This is a circumstance complained of by every planter, as the maintenance of more than are requisite for the culture of the estate is attended with great expence. Motives of humanity deter them from selling the poor creatures, or turning them adrift from the spot where they have been born and brought up, in the midst of friends and relations.

What I have here said respecting the condition and treatment of slaves, appertains, it must be remembered, to those only who are upon the large plantations in Virginia; the lot of such as are

unfortunate enough to fall into the hands of the lower class of white people, and of hard taskmasters in the towns, is very different. In the Carolinas and Georgia again, slavery presents itself in very different colours from what it does even in its worst form in Virginia.

IV. Pioneering and Agriculture in the West

A. *Land the Lodestone to the West, 1772–1774* [1]

The westward movement began after the Seven Years' War had removed the fear of attack from the French and Indians. The father of Joseph Doddridge took his family west when the children were small, so that the author of the book, from which this extract is taken, grew up in the pioneer settlements which he describes. The Reverend Joseph Doddridge was an itinerant Methodist preacher.

The Settlements on this side of the mountains commenced along the Monongahela, and between that river and the Laurel Ridge, in the year 1772. In the succeeding year they reached the Ohio river. The greater number of the first settlers came from the upper parts of the then colonies of Maryland, and Virginia. Braddock's trail, as it was called, was the rout by which the greater number of them crossed the mountains. A less number of them came by the way of Bedford and Fort Ligonier, the military road from Pennsylvania to Pittsburgh. They effected their removals on horses furnished with pack-saddles. This was the more easily done, as but few of these early adventurers into the wilderness were encumbered with much baggage.

Land was the object which invited the greater number of these people to cross the mountain, for as the saying then was, "It was to be had here for taking up;" that is, building a cabin and raising a crop of grain, however small, of any kind, entitled the occupant to four hundred acres of land, and a preemption right to one thousand acres more adjoining, to be secured by a land office warrant. This right was to take effect if there happened to be so much vacant land or any part thereof, adjoining the tract secured by the settlement right.

B. *Pioneering in Kentucky, 1780–1790* [2]

The first permanent settlements in Kentucky were made about 1780, and ten years later there were probably a hundred thousand persons in that territory. It was a favorite destination for the early western pioneers, as it was easily reached by the Cumberland Gap. Imlay emigrated to that country after serving as a captain in the Revolutionary army, and there became a deputy surveyor.

[1] *Notes, on the Settlement and Indian Wars, of the Western Parts of Virginia and Pennsylvania.* By Jos. Doddridge (Wellsburgh, Va., 1824), 99–100.

[2] *A Topographical Description of the Western Territory of North America.* By G. Imlay (New York, 1793), I, 133–6.

Under such circumstances, the first settlement of Kentucky was formed, which soon opened a considerable quantity of land in the county of Lincoln, which lies in the upper part of the state, and contiguous to the wilderness, which ends in this delectable region.

As the country gained strength, the stations began to break up in that part of the country, and their inhabitants to spread themselves, and settle upon their respective estates. But the embarassment they were in for most of the conveniences of life, did not admit of their building any other houses but of logs, and of opening fields in the most expeditious way for planting the Indian corn; the only grain which was cultivated at that time.

A log-house is very soon erected, and in consequence of the friendly disposition which exists among those hospitable people, every neighbour flew to the assistance of each other upon occasions of emergencies. Sometimes they were built of round logs entirely, covered with rived ash shingles, and the interstices stopped with clay, or lime and sand, to keep out the weather. The next object was to open the land for cultivation. There is very little under-wood in any part of this country, so that by cutting up the cane, and girdling the trees, you are sure of a crop of corn. The fertility of the soil amply repays the labourer for his toil; for if the large trees are not very numerous, and a large proportion of them the sugar maple, it is very likely from this imperfect cultivation, that the ground will yield from 50 to 60 bushel of corn to the acre. The second crop will be more ample; and as the shade is removed by cutting the timber away, great part of our land will produce from seventy to one hundred bushels of corn from an acre. This extraordinary fertility enables the farmer who has but a small capital to increase his wealth in a most rapid manner (I mean by wealth the comforts of life). His cattle and hogs will find sufficient food in the woods, not only for them to subsist upon, but to fatten them. His horses want no provender the greatest part of the year except cane and wild clover; but he may afford to feed them with corn the second year. His garden, with little attention, produces him all the culinary roots and vegetables necessary for his table; and the prolific increase of his hogs and poultry, will furnish him the second year, without fearing to injure his stock, with a plenty of animal food; and in three or four years his stock of cattle and sheep will prove sufficient to supply him with both beef and mutton; and he may continue his plan at the same time of increasing his stock of those useful animals. By the fourth year, provided he is industrious, he may have his plantation in sufficient good order to

build a better house, which he can do either of stone, brick, or a framed wooden building, the principal articles of which will cost him little more than the labour of himself and domestics; and he may readily barter or sell some part of the superfluous productions of his farm, which it will by this time afford, and procure such things as he may stand in need of for the completion of his building. Apples, peaches, pears, &c., &c., he ought to plant when he finds a soil or eligible situation to place them in, as that will not hinder, or in any degree divert, him from the object of his aggrandizement.— I have taken no notice of the game he might kill, as it is more a sacrifice of time to an industrious man than any real advantage.

Such has been the progress of the settlement of this country from dirty stations or forts, and smoaky huts, that it has expanded into fertile fields, blushing orchards, pleasant gardens, luxuriant sugar groves, neat and commodious houses, rising villages, and trading towns. Ten years have produced a difference in the population and comforts of this country, which to be pourtrayed in just colours would appear marvellous. To have implicite faith or belief that such things have happened, it is first necessary to be (as I have been) a spectator of such events.

C. *Live Stock Farming in Ohio, 1806* [1]

There was very little money profit in farming in the new settlements of the west, as there was no adequate market for the produce, and the few markets that there were, like New Orleans, were easily glutted. Cattle, moreover, had the advantage that they could be driven to market. The first cattle that were so marketed were driven from Ohio to Baltimore in 1805, and this proved the beginning of a profitable trade. Ashe was an unfriendly and severe critic of the western country and probably exaggerated the statement of Mr. Digby, who lived near Cincinnati.

I learned from Mr. Digby (so he was called) that the best he could do in the Western country, or that any farmer could do, was *just not to starve*. The price of produce was so low and that of labour so high, that very little profit attended the most laborious exertions of industry. Indian corn, in particular, carried a value so mean, that he never offered to sell it, and for his wheat, he made it into flour, he could get but about three dollars per barrel, and even that had, for the most part, to be taken in goods for which he had not always consumption or use. In consequence he was about to abandon a

[1] *Travels in America, performed in 1806.* By Thomas Ashe (London, 1808), 220–1.

system so little advantageous, and take to grazing cattle, breeding hogs, and rearing horses, for distant markets and foreign use, where *money* was to be obtained, and profit equal to the extent and importance of the business. He had always reaped the benefit of this plan, having sent his son in the spring of the year with a boat carrying two hundred live hogs to New Orleans, where they sold all round at the rate of twelve dollars per cwt. though they cost him nothing but the expense of the voyage and some small attendance in the woods, where they breed and maintain themselves all the year round.

V. Public Lands

A. *Democratic Land Holding, 1795* [1]

One of the striking effects of the westward movement was the growth of democracy, both political and economic. In the West there was essential equality of fortunes and of education. This was a direct result of the equality of opportunity offered to every settler by the cheap and almost free lands, which were divided for the most part into small holdings.

The cultivated lands in this country [Shenandoah Valley] are mostly parcelled out in small portions; there are no persons here, as on the other side of the mountains, possessing large farms; nor are there any eminently distinguished by their education or knowledge from the rest of their fellow citizens. Poverty also is as much unknown in this country as great wealth. Each man owns the house he lives in and the land which he cultivates, and everyone appears to be in a happy state of mediocrity, and unambitious of a more elevated situation than what he himself enjoys.

B. *Speculation in Public Lands, 1806* [2]

In 1800 Congress adopted the credit system of selling land at the fixed price of $2 an acre. Under this law only one-fourth of the purchase money had to be paid down, the balance being paid in three annual installments. This led to considerable speculation and the purchase by venturesome individuals of larger amounts of land than they could pay for. But, as Ashe points out, the factors were so numerous which favored the rise in the value of land that speculation of this character was very tempting.

By virtue of the treaty with the aboriginal confederacy and subsequent purchases, Congress has become the proprietor of nearly

[1] *Travels through the States of North America, and the Provinces of Upper and Lower Canada, during the Years 1795, 1796, and 1797.* By Isaac Weld, Junior (4th edition, London, 1800), 170.

[2] *Travels in America, performed in 1806.* By Thomas Ashe (London, 1808), 89–90.

all the fine lands in the state [Ohio]. I have mentioned where such lands most abound, and should have stated that nearly one third of the country is mountainous and ridgy, bog and morass, to such a degree as not to be worth one cent per acre. The principal part of the state of this character lies to the north-east, and east of the river Scioto. The best land is to the west of that river, and continues with few exceptions to the boundary westward of the Great Miami. It is very necessary that purchasers at a distance should be aware of this, as I have known several who bought in a distant market at a good price come several thousand miles to take possession of a sterile mountain or an unreclaimable swamp. The truth is, that no person should buy who is not on the spot, or who has not a confidential agent. The mode of sale adopted by Congress is highly commendable. The entire country is surveyed and divided into sections of six hundred and forty acres each. A certain number of these sections lying contiguous compose a township, and a certain number of townships form a range. The sections are all numbered, and each number sixteen in every township is reserved for the purpose of education and the support of its professors. There are also reservations which cannot be sold under eight dollars an acre; but every other acre of Congress land is sold at two dollars an acre forever: and, to encourage settlers, the period of four years is allowed for the entire payment, which commences one-fourth at the bargain, and the remainder at three yearly instalments. This indulgence on the part of government was most productive to a few sordid monopolizers, called land jobbers or land speculators, who made large contracts for twenty thousand to five hundred thousand acres of the best land and in the best situations, and have already sold the greatest part at from three to five dollars per acre. A meadow called the Rick-a-way plains, containing ten thousand acres free of wood, is advanced by one of these gentlemen, from the two dollars an acre to be paid by his contract, to thirty dollars per acre, and a considerable part of it is already sold. The portion under cultivation has yielded one hundred and ten bushels of corn, and fifty bushels wheat per acre. The land the most sought after is on the Scioto, the Ohio, and the Miamis: on which situations the title of Congress is for the most part bought up, and the present owners demand for it from six to twelve dollars per acre. But if the land should be on a mill seat, or place eligible for the site of a village or town, the price might profitably be raised to one hundred dollars per acre.

Many local circumstances sometimes also unite to raise the price

of certain lands. Such as their vicinity to improving towns; their abundance of ship timber, the facility of conveying it to builders' yards, and their possession of the sugar-maple, cherry tree, sassafras, cotton, and other plants. On the whole, I know of no speculation so promising, as that of buying the remaining good lands, reservations, and all (except schools, reservations which are never to be sold) from Congress at two dollars per acre, and of holding them for the space of ten years; after that period no moderate land will be sold under ten dollars per acre, and land of the first qualities and situation will fetch fifty in general, and much more in particular, per acre. The reasons for this are obvious; the lands of the Atlantic States are not to be compared to these in point of fertility and every excellence; the climate here is not worse, and the State tolerates no slavery.

C. *Sale of Public Lands, 1796–1816* [1]

The sales of the public lands of the United States are given in the following table for the period 1796 to 1806.

SALES OF PUBLIC LANDS

Since the opening of the several land offices for the sale of lands belonging to the United States, the following sums have been received into the Treasury, each year from the proceeds of the sales of public lands, viz.: —

	Dolls.	Cts.
In 1796	4,836	13
1797	83,540	60
1798	11,963	11
1799		
1800	443	75
1801	167,726	6
1802	188,628	2
1803	165,675	69
1804	487,526	79
1805	540,193	80
1806	765,245	73
In 1807	466,163	27
1808	647,939	6
1809	442,252	33
1810	696,548	82
1811	1,040,237	53
1812	710,427	78
1813	835,655	14
1814	1,135,971	9
1815	1,287,959	28
1816 estimated at	1,500,000	00

The whole number of acres sold at the different land offices, north-west of the river Ohio, from the commencement of the sales, to October 1st, 1816, was seven millions fifty-four thousand six hundred and eighty-nine; the whole purchase money, was $14,960,784.48, and the balance due, at the latter period, was $4,511,202.85. . . .

[1] *A Statistical View of the Commerce of the United States of America.* By Timothy Pitkin (2d edition, New York, 1817), 375.

VI. Internal Trade and Transportation

A. *By Stage from Boston to Savannah, 1802* [1]

Travel and trade were for the most part confined to the natural waterways, with which the United States was so well supplied. Indeed the very excellence of these routes retarded the building of roads in the eastern states. When land travel was necessary it was usually made on horseback. Owing to the badness of the roads travel by stage did not become important until the beginning of the nineteenth century. By 1802, however, roads had been built along the whole Atlantic coast, and a little later stages were running from Philadelphia to Pittsburgh, a distance of over three hundred miles. Michaux was sent to this country by the French government to study the forests of America, but did not confine his observations to that subject.

Till the year 1802, the stages that set out at Philadelphia did not go farther South than to Petersburg in Virginia, which is about three hundred miles from Philadelphia; but in the month of March of that year a new line of correspondence was formed between the latter city and Charleston. The journey is about a fortnight, the distance three hundred miles, and the fare fifty piastres [dollars]. There are stages also between Philadelphia, New York, and Boston, as well as between Charleston and Savannah, in Georgia, so that from Boston to Savannah, a distance of twelve hundred miles, persons may travel by the stages.

B. *Traveling by Wagon, 1806* [2]

If one could not make use of the fairly comfortable stage, then traveling took on new terrors. The elliptical spring over the axles of wagons was not introduced until 1825.

. . . The roads being bad at this season of the year, we could not procure the stage which otherwise runs upon this road. The waggon we hired is common in the States, and is used by the country people to carry their provisions to market, or to transport goods from one part of the country to the other. A great number are constantly employed on the road between Skenesborough and Troy [N. Y.]. It is a long narrow cart upon four wheels, and drawn by two horses abreast. When used as a stage for travelling, a couple of chairs are placed in it: but it is a very rough method of riding; for the waggon

[1] *Travels to the Westward of the Allegany Mountains.* By F. A. Michaux (London, 1805), 25n.

[2] *Travels through Canada, and the United States of North America, in the Years 1806, 1807, & 1808.* By John Lambert (2d edition, London, 1814), II, 26–7.

has no springs, and a traveller ought to have excellent nerves to endure the shaking and jolting of such a vehicle over bad roads.

C. *Bad Roads in 1810*[1]

Practically the only good roads in the United States in 1810 were the turnpikes, built and maintained by private companies and on which tolls were charged. As soon as the traveler left these improved thoroughfares, the roads became execrable. The account given in the sprightly journal of Miss Dwight is probably not exaggerated.

Mansfield — N J — Sat — morn October 27 [1810] —

We yesterday travell'd the worst road you can imagine — over mountains & thro' vallies — We have not I believe, had 20 rods of level ground the whole day — and the road some part of it so intolerably bad on every account, so rocky & so gullied, as to be almost impassable — 15 miles this side of Morristown, we cross'd a mountain call'd Schyler or something like it —

. . . After we left Mansfield, we cross'd the longest hills, and the worst road, I ever saw — two or three times after riding a little distance on turnpike, we found it fenced across & were oblig'd to turn into a wood where it was almost impossible to proceed — large trees were across, not the road for there was none, but the only place we could possibly ride — It appear'd to me, we had come to an end of the habitable part of the globe — but all these difficulties were at last surmounted, & we reach'd the Delaware — The river where it is cross'd, is much smaller than I suppos'd — The bridge over it is elegant I think — It is covered & has 16 windows each side — As soon as we pass'd the bridge, we enter'd Easton, the first town in Pennsylvania — It is a small but pleasant town — the houses are chiefly small, & built of stone — very near together — The meeting house, Bank, & I think, market, are all of the same description — There are a few very handsome brick houses, & some wooden buildings — From Easton, we came to Bethlehem, which is 12 miles distant from it — . . .

D. *Traveling from the East to Kentucky, 1793*[2]

The routes to the west lay through the mountains, and of these that through the Cumberland Gap was the one earliest and most generally used. The easier

[1] *A Journey [from Connecticut] to Ohio in 1810 as recorded in the Journal of Margaret Van Horn Dwight* (New Haven, 1912), 13, 18. Printed by permission of the editor, M. Farrand, and the publisher, Yale University Press.

[2] *A Topographical Description of the Western Territory of North America.* By G. Imlay (New York, 1793), I, 140–5.

approaches, now followed to the north by the Erie Canal or to the south around the end of the Appalachian mountain chain, were in each case blocked by Indian tribes. It was a difficult and even a dangerous journey, but once the rivers on the other side of the mountains were reached, it became much easier. Imlay was a resident of Kentucky and had himself made the journey more than once.

Travellers or emigrants take different methods of transporting their baggage, goods, or furniture from the places they may be at to the Ohio, according to circumstances or their object in coming to the country. For, instance, if a man is travelling only for curiosity, or has no family or goods to remove, his best way would be to purchase horses, and take his route through the Wilderness; but provided he has a family, or goods of any sort to remove, his best way, then, would be to purchase a waggon and team of horses to carry his property to Redstone Old Fort, or to Pittsburg, according as he may come from the northern or southern States. A good waggon will cost at Philadelphia about 10 l. (I shall reckon everything in sterling money for your greater convenience) and the horses about 12 l. each; they would cost something more at Baltimore and Alexandria. The waggon may be covered with canvas, and if it is the choice of the people, they may sleep in it at nights with the greatest safety. But if they should dislike that, there are inns of accommodation the whole distance on the different roads. To allow the horses a plenty of hay and corn would cost about 1 s. *per diem*, each horse; supposing you purchase your forage in the most œconimical manner, *i. e.* of the farmers, as you pass along, from time to time as you may want it, and carry it in your waggon; and not of innkeepers, who must have their profits. The provisions for the family I would purchase in the same manner; and by having two or three camp kettles, and stopping every evening when the weather is fine upon the brink of some rivulet, and by kindling a fire they may soon dress their food. There is no impediment to these kind of things, it is common and may be done with the greatest security; and I would recommend all persons who wish to avoid expence as much as possible to adopt this plan. True, the charges at inns on those roads are remarkably reasonable, but I have mentioned those particulars as there are many unfortunate people in the world, to whom the saving of every shilling is an object, and as this manner of journeying is so far from being disagreeable, that in a fine season it is extremely pleasant.

Provisions in those countries are very cheap, beef, mutton, and pork, are something less than 2 d. per lb.; dunghill fowls are from 4 d. to 6 d. each; duck, 8 d.; geese and turkeys, 1 s. 3 d.; butter, 5 d.;

cheese, I will say nothing about, as there is very little good until you arrive in Kentucky. Flour is about 12 s. 6 d. per cwt.

The best way is to carry their tea and coffee from the place they may set out at; good green tea will be from 4 s. 6 d. to 6 s. per lb.; souchong from 3 s. to 5 s.; coffee will cost from 1 s. 3 d. to 1 s. 6 d. per lb.; loaf sugar from 7 d. to 10 d. But I would not recommend their carrying much sugar, for as the back country is approached, the maple sugar is in abundance, and may be bought from 4 d. to 6 d. per lb. Such are the expenses to be incurred travelling to this country by Redstone and Pittsburg.

The distance which one of those waggons may travel one day with another is little short of twenty miles. So that it will be a journey from Alexandria to Redstone Old Fort of eleven or twelve days, from Baltimore a day or two longer, and from Philadelphia to Pittsburg I should suppose it would require nearly twenty days; as the roads are not so good as from the two former places.

From these prices the expence of moving a family, from either of the sea ports I have mentioned to the Ohio, may be computed with tolerable exactitude.

The best time for setting out for this country from any of the Atlantic ports, is the latter end of either September or April. The autumn is the most eligible of the two; as it is most likely that the roads across the mountains will be drier, and provisions and forage are then both more plentiful and cheap than in the spring.

If this mode should not suit the convenience of the party, by reason of their not wanting a waggon or horses when they arrive in this country, they may have their goods brought out to Redstone Old Fort from Alexandria for 15 s. per cwt. and in like proportion from Baltimore and Philadelphia.

At Redstone Old Fort, or Pittsburg, they can either buy a boat, which will cost them about 5 s. per ton, or freight their goods to Kentucky for about 1 s. per cwt. There is no regular business of this sort; but as there are always boats coming down the river, 1 s. per cwt. is the common charge for freight. But more frequently when there is boat room to spare, it is given to such as are not able to purchase a boat, or have not a knowledge of the navigation. However, that is a business which requires no skill, and there are always numbers of people coming down, who will readily conduct a boat for the sake of a passage.

The distance from Philadelphia by land to Kentucky is between seven and eight hundred miles; from Baltimore nearly seven hundred;

nearly six hundred from Alexandria; and upwards of five hundred from Richmond.

E. *Trade down the Mississippi River, 1795* [1]

As the population grew in the western country they began to produce a surplus which they sent to market in exchange for the manufactured commodities of the East or of Europe. The bulky and heavy agricultural products or raw materials of the western settlements were usually sent downstream to the New Orleans market, while they drew their supplies overland from the seaboard cities.

The people in Pittsburgh, and the western country along the waters of the Ohio, draw their supplies from Philadelphia and Baltimore; but they send the productions of the country, which would be too bulky for land carriage, down the Ohio and Mississippi to New Orleans. From Pittsburgh to New Orleans, the distance is two thousand, one hundred and eighty-three miles. On an average it takes about twenty-eight days to go down there with the stream; but to return by water it takes from sixty days to three months. The passage back is very laborious as well as tedious; on which account they seldom think of bringing back boats which are sent down from Pittsburgh, but on arriving at New Orleans they are broken up, and the plank sold. These boats are built on the cheapest construction, and expressly for the purpose of going down stream. The men get back the best way they can, generally in ships bound from New Orleans to the southern states, and from thence home by land. Now, if the passage from the Ohio to the Patowmac is opened, it cannot be supposed that the people in Pittsburgh and the vicinity will continue thus to send the produce down to Orleans, from whence they cannot bring anything in return; they will naturally send to the federal city, from whence they can draw the supplies they are in want of, and which is so much nearer to them, that when the navigation is perfected it will be possible to go there and back again in the same time that it requires merely to go down to New Orleans.

F. *Trade along the Western Rivers, 1802* [2]

A clear and graphic picture of western trade at the beginning of the nineteenth century is given us by Michaux, with his accustomed accuracy and attention to details. The reasons for the importance of Pittsburg and of New Orleans become very evident from a study of western trade.

[1] *Travels through the States of North America, and the Provinces of Upper and Lower Canada, during the Years 1795, 1796, and 1797.* By Isaac Weld, Junior (4th edition, London, 1800), 66–7.

[2] *Travels to the Westward of the Allegany Mountains.* By F. A. Michaux (London, 1805), 60–1, 90.

Pittsburgh has been long considered by the Americans as the key to the western country. . . .

However, though this town has lost its importance as a military post it has acquired a still greater one in respect to commerce. It serves as a staple for the different sorts of merchandise that Philadelphia and Baltimore send, in the beginning of spring and autumn, for supplying the states of Ohio, Kentucky, and the settlement of Natches.

The conveyance of merchandise from Philadelphia to Pittsburgh is made in large covered waggons, drawn by four horses, two a-breast. The price of carrying goods varies according to the season; but in general it does not exceed six piasters [dollars] the quintal. They reckon it to be three hundred miles from Philadelphia to Pittsburgh, and the carriers generally make it a journey of from twenty to twenty-four days. The price of conveyance would not be so high as it really is, were it not that the waggons frequently return empty; notwithstanding they sometimes bring back, on their return to Philadelphia or Baltimore, fur skins that come from Illinois or Ginseng, which is very common in that part of Pennsylvania.

Pittsburgh is not only the staple of Philadelphia and Baltimore trade with the western country, but of the numerous settlements that are formed on the Monongahela and Alleghany. The territorial produce of that part of the country finds an easy and advantageous conveyance by the Ohio and Mississippi. Corn, hams and dried pork are the principal articles sent to New Orleans, whence they are re-exported into the Carribbees. They also export for the consumption of Louisiana, bar-iron, coarse linen, bottles manufactured at Pittsburgh, whiskey, and salt butter. A great part of these provisions come from Redstone, a small commercial town, situated upon the Monongahela, about fifty miles beyond Pittsburgh. . . .

The inhabitants of Marietta were the first that had an idea of exporting directly to the Carribbee Islands the produce of the country, in a vessel built in their own town, which they sent to Jamaica. The success which crowned this first attempt excited such emulation among the inhabitants of that part of the Western Country, that several new vessels were launched at Pittsburgh and Louisville, and expedited to the isles, or to New York and Philadelphia. The shipyard at Marietta is situated near the town, on the Great Muskingum. When I was there they were building three brigs, one of which was of two hundred and twenty tons burthen.

G. *Trade at Pittsburg, 1803* [1]

Baltimore and Philadelphia were the great markets from which supplies were sent west; Pittsburg owed its importance to the fact that it was situated at the head of navigation on the Ohio River and hence was the distributing center for the whole western region. New Orleans, at the mouth of the Mississippi River, was the natural receiving station for produce that was sent downstream. Harris was a resident of Massachusetts who made a journey to the west for the sake of regaining his health.

Dry goods in general are sold nearly as cheap as at Baltimore; other goods, are, on account of the carriage, which is four dollars fifty cents from Baltimore and five dollars pr. 100 lbs. from Philadelphia proportionably higher. The merchants here, as well as those of the western country, receive their goods from Philadelphia and Baltimore; but a small part of the trade being given to New-York and Alexandria. The terms of credit are generally from nine to twelve months. The produce which they receive of the farmers is sent to New Orleans; the proceeds of which are remitted to the Atlantic States, to meet their payments.

Most of the articles of merchandize brought in waggons over the mountains in the summer season, and destined for trade down the river, are stored at this place to be ready for embarkation. With these a great many trading boats are laden, which float down the river, stopping at the towns on its banks to vend the articles. In a country, so remote from commerce, and of so great extent, where each one resides on his own farm, and has neither opportunity nor convenience for visiting a market, these trading boats contribute very much to the accommodation of life, by bringing to every man's house those little necessaries which it would be very troublesome to go a great distance to procure.

H. *Character of Western Trade, 1806* [2]

Ashe gives an amusing though probably not altogether reliable account of the trade that was carried on throughout the newer sections of the country. The absence of money, and the resort to barter in carrying on trade, were characteristic of the western as they had been of colonial trade. The money was sent back East to buy more needed goods, and never could be kept in the West.

[1] *The Journal of a Tour into the Territory Northwest of the Allegany Mountains; Made in the Spring of the Year 1803.* By Thaddeus Mason Harris (Boston, 1805), 42–43.

[2] *Travels in America, performed in 1806.* By Thomas Ashe (London, 1808), 51–3.

I do not conceive that I assert too much, though it may be surprising to you, in saying, that the entire business of these waters is conducted without the use of money. I have already enumerated the produce; consisting chiefly of flour, corn, salt, cyder, apples, live hogs, bacon, glass, earthenware, &c. I have also mentioned the little towns and settlements along them. To such places persons come from Baltimore and Philadelphia with British goods, which they exchange for the above productions; charging on their articles at least 300 *per cent.* and allowing the farmer and manufacturer but very low terms for theirs. Some of these prices are as follows: whiskey, two shillings a gallon; live hogs, two dollars and a half a hundredweight; bacon, three dollars a hundredweight; flour, three dollars a barrel; corn, a quarter-dollar a bushel; butter an eighth of a dollar a pound; cyder, four dollars a barrel; native sugar, a sixteenth of a dollar a pound; and so on in proportion, for any other produce of the country. The storekeepers make two annual collections of these commodities; send them down the rivers to New Orleans; and there receive an immense profit in Spanish dollars, or bills on Philadelphia at a short date. They then purchase British and West India goods of all kinds; send them by waggons over the mountains, to their stores in the western country, where they always keep clerks; and again make their distributions and collections; descend the waters; and return by the same circuitous mountainous route, of at least 5650 miles, as nearly as can be calculated on an average between the extreme head of the waters and Pittsburg, thus:

	Miles
From each station to New Orleans	2300
From New Orleans to Philadelphia, by sea	3000
From Philadelphia back to each station, by the way of the Alleghany mountains	350
Total	5650

A few, on receiving their cash at New Orleans, return by land through the wilderness, Tennasee, and Kentucky, to their stations at and above Pittsburg; but this is seldom done. The distance which is thus performed is only 1300 miles.

These storekeepers are obliged to keep every article which it is possible that the farmer and manufacturer may want. Each of their shops exhibits a complete medley; a magazine where are to be had both a needle and an anchor, a tin pot and a large copper boiler, a child's whistle and a pianoforte, a ring dial and a clock, a skein of thread and trimmings of lace, a check frock and a muslin gown, a

frieze coat and a superfine cloth, a glass of whiskey and a barrel of brandy, a gill of vinegar and a hogshead of Madeira wine, &c. Hence you will perceive that money is not always necessary as a circulating medium: however, as farmers and manufacturers advance in business, and find their produce more than equal to the wants of their families, they contract with the storekeeper to receive the annual balance of the latter, either in cash or in land to an equal amount; for though no person cultivates a tenth part of the land that he possesses, everyone is animated with the rage of making further accessions. Thus the great landholders ultimately absorb all the hard money; and as they principally reside in the large towns on the Atlantic States, the money finds its way back to those, and leaves many places here without a single dollar. This is productive of distressing incidents to small farmers who supply the markets with provisions; for whatever they have to sell, whether trivial or important, they receive in return nothing but an order on a store for the value in goods; and as the wants of such persons are few, they seldom know what articles to take. The storekeepers turn this circumstance to advantage, and frequently force on the customer a thing for which he has no use; or, what is worse, when the order is trifling, tell him to sit down at the door and drink the amount if he chooses. As this is often complied with, a market day is mostly a scene of drunkenness and contention, fraud, cunning, and duplicity; the storekeeper denying the possession of a good article, till he fails in imposing a bad one. I have known a person to ask for a pair of shoes, and receive for answer that there were no shoes in the store, but some *capital gin* that could be recommended to him. I have heard another ask for a rifle gun, and be answered that there were no rifles, but that he could be accomodated with the best *Dutch looking glasses* and *German flutes* in the western country. Another was directed by his wife to bring her a warming pan, smoothing irons, and scrubbing brushes; but these were denied; and a *wooden cuckoo-clock*, which the children would not take a week to demolish, was sent home in their stead. I could not help smiling at these absurdities, though I believe they deserve the name of impositions, till an incident reduced me to the condition of those whom I have just described. I rode an excellent horse to the head of the waters; and finding him of no further use from my having to take boat there, I proposed selling him to the best bidder. I was offered in exchange for him salt, flour, hogs, land, cast-iron salt pans, Indian corn, whiskey, — in short, everything but what I wanted, which was money. The highest offer made, was

cast-iron salt pans to the amount of a hundred and thirty dollars. I asked the proprietor of this heavy commodity, how much cash he would allow me instead of such an incumbrance; his answer was, without any shame or hesitation, *forty dollars* at most. I preferred the pans; though they are to be exchanged again for glass bottles at Pittsburg, tobacco or hemp in Kentucky, and dollars in New Orleans. These various commercial processes may occupy twelve months; nor am I then certain of the amount, unless I give 30 *per cent.* to secure it.

The words *buy* and *sell* are nearly unknown here; in business nothing is heard but the word *trade*. "Will you trade your watch, your gun, pistols, horses? &c." means, "Will you exchange your watch, gun, &c. for corn, pigs, cattle, Indian meal? &c." But you must anticipate all this from the absence of money.

I. *The Peddler as a Distributor of Goods, 1797* [1]

When means of transportation were poor and expensive and markets were local, the peddler performed a very useful service in distributing manufactured goods to consumers in regions far removed from the points of production. A graphic picture is given by Dwight, who later became president of Yale College.

The inhabitants of this village [Berlin, Conn.] make great quantities of *tin ware;* or untensils, formed of tinned plates. As this species of manufacture, on the Western side of the Atlantic, probably commenced here; I will give you an account of the manner, in which it was introduced. . . .

For many years, after tinned plates were manufactured in this place into culinary vessels, the only method used by the pedlars for conveying them to distant towns, for sale, was by means of a horse and two baskets, balanced on his back. After the war, carts and waggons were used for this purpose,-and have, from that time to the present, been the only means of conveyance which have been adopted.

The manner, in which this ware is disposed of, puts to flight all calculation. A young man is furnished by the proprietor with a horse, and a cart covered with a box, containing as many tin vessels, as the horse can conveniently draw. This vehicle within a few years has, indeed, been frequently exchanged for a waggon; and then the load is doubled. Thus prepared, he sets out on an expedition for the winter. A multitude of these young men direct themselves to the Southern States; and in their excursions travel wherever they

[1] *Travels in New England and New York.* By Timothy Dwight (London, 1823), II, 43–4.

can find settlements. Each of them walks, and rides, alternately, through this vast distance, till he reaches Richmond, Newbern, Charleston, or Savannah; and usually carries with him to the place of his destination no small part of the gain, which he has acquired upon the road. Here he finds one or more workmen, who have been sent forward to co-operate with him, furnished with a sufficient quantity of tinned plates to supply him with all the ware which he can sell during the season. With this he wanders into the interior country; calls at every door on his way; and with an address, and pertinacity, not easily resisted, compels no small number of the inhabitants to buy. At the commencement of the summer they return to New-York; and thence to New-Haven, by water; after selling their vehicles, and their horses. The original load of a single horse, as I am told, is rarely worth more than three hundred dollars; or of a waggon, more than six hundred. Yet this business is said to yield both the owner and his agent valuable returns; and the profit to be greater than that, which is made by the sale of any other merchandize of equal value. Even those, who carry out a single load, and dispose of it in the neighbouring country find their employment profitable. In this manner considerable wealth has been accumulated in Worthington, and in several towns in its vicinity.

Every inhabited part of the United States is visited by these men. I have seen them on the peninsula of Cape Cod, and in the neighbourhood of Lake Erie; distant from each other more than six hundred miles. They make their way to Detroit, four hundred miles farther; to Canada; to Kentucky; and, if I mistake not, to New-Orleans and St. Louis. . . .

J. *The Invention of the Steamboat, 1807* [1]

Although several other American inventors had succeeded in propelling vessels through the water by means of steam, Fulton was the first to make a commercially successful steamboat. The sailing of the *Clermont* up the Hudson in 1807 marked the real beginning of steamboat navigation in the United States, and introduced a new epoch in transportation.

FIRST LETTER

I arrived this afternoon at four o'clock in the steamboat from Albany. As the success of my experiment gives me great hopes that such boats may be rendered of great importance to my country, to prevent erroneous opinions and give some satisfaction to my friends

[1] *Two Letters*. By Robert Fulton. Reprinted in Epochs of American History. Edited by F. W. Halsey (New York, 1912), IV, 195–6.

of useful improvements, you will have the goodness to publish the following statement of facts:

I left New York on Monday at one o'clock and arrived at Clermont, the seat of Chancellor Livingston, at one o'clock on Tuesday: time, twenty-four hours; distance, one hundred and ten miles. On Wednesday I departed from the Chancellor's at nine in the morning, and arrived at Albany at five in the afternoon: distance, forty miles; time, eight hours. The sum is one hundred and fifty miles in thirty-two hours, equal to near five miles an hour.

On Thursday, at nine o'clock in the morning, I left Albany, and arrived at the Chancellor's at six in the evening. I started from thence at seven, and arrived at New York at four in the afternoon: time, thirty hours; space run through, one hundred and fifty miles, equal to five miles an hour. Throughout my whole way, both going and returning, the wind was ahead. No advantage could be derived from my sails. The whole has therefore been performed by the power of the steam-engine.

SECOND LETTER

My steamboat voyage to Albany and back has turned out rather more favorably than I had calculated. The distance from New York to Albany is one hundred and fifty miles. I ran it up in thirty-two hours, and down in thirty. I had a light breeze against me the whole way, both going and coming; and the voyage has been performed wholly by the power of the steam-engine. I overtook many sloops and schooners beating to windward, and parted with them.

The power of propelling boats by steam is now fully proved. The morning I left New York there were not perhaps thirty persons in the city who believed that the boat would ever move one mile an hour or be of the least utility; and, while we were putting off from the wharf, which was crowded with spectators, I heard a number of sarcastic remarks. This is the way in which ignorant men compliment what they call philosophers and projectors.

Having employed much time, money, and zeal in accomplishing this work, it gives me, as it will you, great pleasure to see it answer my expectations. It will give a cheap and quick conveyance to the merchandize on the Mississippi, Missouri, and other great rivers, which are now laying open their treasures to the enterprise of our countrymen; and, altho the prospect of personal emolument has been some inducement to me, yet I feel infinitely more pleasure in reflecting on the immense advantage my country will derive.

CHAPTER VIII

INTRODUCTION OF MANUFACTURES AND CONDITION OF THE PEOPLE, 1775–1816

I. Manufactures

A. *Little Manufacturing for Sale, 1775* [1]

Writing just on the eve of the Revolution the author of *American Husbandry* concluded that there was little manufacturing for the market carried on in the colonies, but that home manufactures were generally practiced.

Nothing is more difficult than to discover the amount of their manufactures for sale:. . .

That the manufactures for sale are not so great as some have imagined, may be conceived from the vast number of inhabitants, who in all probability work entirely for themselves; in a country where the minute division of landed property is so great as in the most populous of the northern colonies, and in a climate that will yield little valuable, it is impossible that the people should be able to *purchase* manufactures: poor countrymen in England do it because all their income is paid them in money, whatever may be their work; but in America day-labourers are rarely to be found, except in the neighbourhood of great towns; on the contrary, the man who in England would be a labourer, would there be a little free-holder, who probably raising for many years but little for sale, is forced to work up his wool in his family, his leather, and his flax, after which, the rest of his consumption is scarce worth mentioning. The number of people in the northern colonies who come under this denomination is very great. . . .

B. *Obstacles to Manufactures, 1776* [2]

Some of the disadvantages under which manufactures labored in America, as cited by Dean Tucker, were real and others were imaginary, but the truth was that agriculture, fishing, and commerce were more lucrative branches of enterprise. Tucker wrote with a bias, yet with shrewdness.

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[1] *American Husbandry.* By an American (London, 1775), II, 259–60.

[2] *A Series of Answers to Certain Popular Objections, against Separating from the Rebellious Colonies, and Discarding them entirely.* By Josiah Tucker (Glocester, 1776), 42–3.

In regard to the *Capability* of *America* to rival *Great-Britain* in the Cheapness and Goodness of Manufactures (which are the main Points to be attended to) be it observed, that *America* naturally labours under many capital Defects respecting Manufactures. For in the first Place, it doth not abound with Wool, or Silk, Copper, Iron, Lead, Tin, or Coals; Articles of the utmost Consequence in establishing large and extensive Manufactures: — Secondly, the Climate of the greatest Part of the Country is unfavorable to several Species of Manufactures, being either too cold, and too much frozen up in Winter, or too melting and suffocating in Summer; and very frequently the same Country or Province partakes of both Extremes. Thirdly, the Genius and Disposition of the People are not turned towards hard and constant Labour; a Circumstance this, which is visible through every Part of this great Continent. Fourthly, their small Capitals, and Want of Credit is another very great Impediment; and it is too apparent that this Difficulty is not likely to be removed by their present Conduct. Fifthly, their Desertion of the Sea Coasts, and removing in such Shoals up into the Country, beyond the *Alligahenny* Mountains, as they now do, or lately did, is another great Bar to the Encrease of any Manufactures, which could come in to Competition with the *English* in any foreign Market.

C. *Manufactures after the Revolution, 1788* [1]

During the Revolution, when foreign trade was cut off and the country was thrown upon its own resources, manufactures sprang up on every side. These were encouraged in some of the states by means of protective tariffs. Brissot, who was enthusiastic about everything in the new republic, gives a glowing account of their development which does not quite harmonize with the gloomy picture presented the following year when protection was requested of the national Congress.

EXPORTATIONS AND MANUFACTURES

If any thing can give an idea of the high degree of prosperity, to which these confederated republics are making rapid strides, it is the contemplation of these two subjects. It is impossible to enumerate all the articles to which they have turned their attention; almost one half of which were unknown before the war. Among the principal ones are ship-building, flour, rice, tobacco, manufactures in woollen, linen, hemp and cotton; the fisheries, oils, forges, and the different articles in iron and steel; instruments of agriculture, nails,

[1] *New Travels in the United States of America, performed in 1788.* By J. P. Brissot de Warville (Dublin, 1792), 465–8.

leather, and the numerous objects in which they are employed; paper, paste-board, parchment, printing, pot-ash, pearl-ash, hats of all qualities, ship-timber, and the other wood of construction; cabinet-work, cordage, cables, carriages; works in brass, copper and lead; glass of different kinds; gun-powder, cheese, butter, callicoes, printed linen, indigo, furrs, &c. Ship-building is one of the most profitable branches of business in America. They built ships here before the war, but they were not permitted to manufacture the articles necessary to equip them; every article is now made in the country. A fine ship, called the *Massachusetts*, of eight hundred tons, belonging to Mr. Shaw, had its sails and cordage wholly from the manufacture of Boston; this single establishment gives already two thousand yards of sail-cloth a week.

Breweries augment every where, and take place of the fatal distilleries. There are no less than fourteen good breweries in Philadelphia. The infant woollen manufactory at Hartford, from September, 1788, to September, 1789, gave about five thousand yards of cloth, some of which sells at five dollars a yard; another at Watertown in Massachusetts, promises equal success, and engages the farmers to multiply their sheep.

Cotton succeeds equally well. The spinning machines of Arkwright are well known here, and are made in the country.

We have justly remarked in our work on the United States, that nature invites the Americans to the labour of the forge, by the profuse manner in which she has covered their soil with wood, and interspersed it with metal and coals. Pennsylvania, New Jersey, and Delaware, make annually three hundred and fifty tons of steel, and six hundred tons of nails and nail rods. These articles are already exported from America; as are machines for carding wool and cotton, particularly common cards, which are cheaper than the English, and of a superior quality. In these three states are sixty-three paper-mills, which manufacture annually to the amount of 250,000 dollars. The state of Connecticut last year made five thousand reams, which might be worth nine thousand dollars.

The prodigious consumption of all kinds of glass multiplies the establishment of glass works. The one on the Potowmack employs five hundred persons. They have begun with success, at Philadelphia, the printing of callicoes, cotton, and linen. Sugar refiners are increasing every where. In Pennsylvania are twenty-one powder-mills, which are supposed to produce annually 625 tons of gun powder.

D. *Manufactures before 1789*[1]

The report of Phineas Bond to the English government reassures it that there is no danger that the Americans will manufacture for themselves, but that the English could count confidently on the American market for the disposal of their goods. While Bond's arguments were on the whole sound, it seems that he was generally careful to report what the English would be pleased to read.

In answer to the 6th point of your Grace's inquiries I have collected as accurate an account as I possibly could of the State of manufactures thro' out this continent and have endeavored to form some judgement upon the subject which I take the liberty of submitting to your Grace's consideration. (No. 22) — America must for a long time my Lord be under the necessity of purchasing and importing vast quantities of British or other European manufactures — the preference has and will be given to British manufactures, they are for the most part of the best quality and of course come cheapest to the consumer in the end. The credit too which the merchants of England allow to the American traders, is infinitely more liberal than any other nation upon earth can afford; in so much that many articles of foreign, European manufacture, calculated for the American market, are brought hither circuitously thro' England and English credit is resorted to as the immediate mode of payment for such foreign articles.

In a country, my Lord, so extensive as this continent with a seaboard frontery of 1500 miles in length and a Western limit hitherto undefined at present inhabited by scarcely more than 3,000,000 of people possessing a strong natural disposition to husbandry with a powerful propensity to migrate a series of centuries must elapse before this country will be peopled to such a degree as to make the encouragement of manufacture an object of necessary recourse: Agriculture will long continue the source from whence the mass of people will draw their subsistence. . . . Manufactures which require art, labour, and expence to any great extent of either, may be attempted but they will often fail for want of capitals and because the extensive capitals in Europe can afford their manufactures at a rate, vastly lower, than almost anything can be afforded for which is undertaken here.

Where the raw material however can be taken from the earth and converted into an article of immediate use or speedy demand

[1] *Report of Phineas Bond, British Consul in Philadelphia, to his Government, November 10, 1789.* In Annual Report of the American Historical Association (Washington, 1897), I, 630–2.

with little expence and art and where from the bulk or weight of the foreign manufacture, the expence which may attend the carriage is great, the American manufacturers will have the advantage of the European manufacturers, and in this line the Americans do and will succeed.

Under the description of articles of immediate use and speedy demand may be comprehended nails and coarse manufactures of iron, Tools which relate to husbandry, to architecture and which are used by most Handycraftsmen. Under the description of articles of heavy bulk or weight may be comprehended anvils, forge hammers, anchors and cast irons of various kinds for mills, carriages and other purposes.

E. *A Petition for Protection, 1789* [1]

When the first Congress met under the new Constitution it was petitioned for relief by numerous infant industries. The one cited is typical of many similar ones. The first act passed by Congress was a tariff act, primarily for revenue purposes, but which granted some slight amount of protection.

Saturday, April 11 [1789].

Mr. Smith, (of Maryland) presented a petition from the tradesmen, manufacturers, and others, of the town of Baltimore, which was read, setting forth, That, since the close of the late war, and the completion of the Revolution, they have observed with serious regret the manufacturing and the trading interest of the country rapidly declining, and the attempts of the State Legislatures to remedy the evil failing of their object; that, in the present melancholy state of our country, the number of poor increasing for want of employment, foreign debts accumulating, houses and lands depreciating in value, and trade and manufactures languishing and expiring, they look up to the Supreme Legislature of the United States as the guardians of the whole empire, and from their united wisdom and patriotism, and ardent love of their country, expect to derive that aid and assistance which alone can dissipate their just apprehensions, and animate them with hopes of success in future, by imposing on all foreign articles, which can be made in America, such duties as will give a just and decided preference to their labors; discountenancing that trade which tends so materially to injure them and impoverish their country; measures which, in their consequences, may also contribute to the discharge of the national debt and the due support of the Government; that they have annexed a list of such articles as are or can be manu-

[1] *Annals of Congress* (Washington, 1834), I, 115.

factured amongst them, and humbly trust in the wisdom of the Legislature to grant them, in common with the other mechanics and manufacturers of the United States, that relief which may appear proper.

F. *Report on Manufactures, 1791* [1]

The House of Representatives in January, 1790, requested Hamilton, the Secretary of the Treasury, to prepare a report on manufactures, but he did not present it until nearly two years later, in December, 1791. The report is said by Professor Taussig to be "the strongest presentation of the case for protection which has been made by any American statesman." Owing to the outbreak soon after of the Napoleonic Wars, however, and the consequent greater profitableness of agriculture and commerce, the report had little effect in promoting tariff legislation at the time. The parts cited in this extract are meant to illustrate the state of manufactures rather than the arguments for protection.

The expediency of encouraging manufactures in the United States, which was not long since deemed very questionable, appears at this time to be pretty generally admitted. The embarrassments which have obstructed the progress of our external trade have led to serious reflections on the necessity of enlarging the sphere of our domestic commerce. The restrictive regulations, which in foreign markets abridge the vent of the increasing surplus of our agricultural produce, serve to beget an earnest desire that a more extensive demand for that surplus may be created at home; and the complete success which has rewarded manufacturing enterprise, in some valuable branches, conspiring with the promising symptoms which attend some less mature essays in others, justify a hope that the obstacles to the growth of this species of industry are less formidable than they were apprehended to be; and that it is not difficult to find, in its further extension, a full indemnification for any external disadvantages which are or may be experienced, as well as an accession of resources favorable to national independence and safety.

There still are, nevertheless, respectable patrons of opinions unfriendly to the encouragement of manufactures. The following are, substantially, the arguments by which these opinions are defended:

"In every country (say those who entertain them), agriculture is the most beneficial and productive object of human industry. This position, generally, if not universally true, applies with peculiar emphasis to the United States, on account of their immense tracts of fertile territory, uninhabited and unimproved. Nothing can

[1] *Report on Manufactures.* By Alexander Hamilton. In American State Papers, Series Finance (Washington, 1832), I, 123–144, *passim.*

afford so advantageous an employment for capital and labor, as the conversion of this extensive wilderness into cultivated farms. Nothing equally with this can contribute to the population, strength, and real riches of the country.

"To endeavor, by the extraordinary patronage of government, to accelerate the growth of manufactures, is in fact to endeavor, by force and art, to transfer the natural current of industry from a more to a less beneficial channel. . . .

"This policy is not only recommended to the United States by considerations which affect all nations; it is, in a manner, dictated to them by the imperious force of a very peculiar situation. The smallness of their population, compared with their territory; the constant allurements to emigration from the settled to the unsettled parts of the country; the facility with which the less independent condition of an artisan can be exchanged for the more independent condition of a farmer; these and similar causes conspire to produce, and for a length of time must continue to occasion, a scarcity of hands for manufacturing occupation, and dearness of labor generally. To these disadvantages for the prosecution of manufactures, a deficiency of pecuniary capital being added, the prospect of a successful competition with the manufacturers of Europe must be regarded as little less than desperate. Extensive manufactures can only be the offspring of a redundant, at least of a full population. Till the latter shall characterize the situation of this country, 'tis vain to hope for the former. . . ."

This mode of reasoning is founded upon facts and principles which have certainly respectable pretensions. . . .

The objections to the pursuit of manufactures in the United States, which next present themselves to discussion, represent an impracticability of success arising from three causes: scarcity of hands, dearness of labor, want of capital.

The two first circumstances are to a certain extent real, and within due limits ought to be admitted as obstacles to the success of manufacturing enterprise in the United States. But there are various considerations which lessen their force, and tend to afford an assurance that they are not sufficient to prevent the advantageous prosecution of many very useful and extensive manufactories. . . .

To all the arguments which are brought to evince the impracticability of success in manufacturing establishments in the United States, it might have been a sufficient answer to have referred to the experience of what has been already done. It is certain that several

important branches have grown up and flourished with a rapidity which surprises, affording an encouraging assurance of success in future attempts. Of these it may not be improper to enumerate the most considerable: —

1. *Of Skins.*— Tanned and tawed leather, dressed skins, shoes, boots, and slippers, harness and saddlery of all kinds, portmanteaus and trunks, leather breeches, gloves, muffs and tippets, parchment and glue.

2. *Of Iron.*— Bar and sheet iron, steel, nail rods and nails, implements of husbandry, stoves, pots, and other household utensils, the steel and iron work of carriages, and for shipbuilding, anchors, scale-beams, and weights, and various tools of artificers, arms of different kinds; though the manufacture of these last has of late diminished for want of demand.

3. *Of Wood.*— Ships, cabinet wares and turnery, wool and cotton cards, and other machinery for manufactures and husbandry, mathematical instruments, coopers' wares of every kind.

4. *Of Flax and Hemp.*— Cables, sail-cloth, cordage, twine and packthread.

5. Bricks, and coarse tiles and potters' wares.

6. Ardent spirits and malt liquors.

7. Writing and printing paper, sheathing and wrapping paper, pasteboards, fullers' or press papers, paper hangings.

8. Hats of fur and wool, and mixtures of both, women's stuff and silk shoes.

9. Refined sugars.

10. Oils of animals and seeds, soap, spermaceti and tallow candles.

11. Copper and brass wares (particularly utensils for distillers, sugar refiners and brewers), andirons and other articles for household use, philosophical apparatus.

12. Tin wares for most purposes of ordinary use.

13. Carriages of all kinds.

14. Snuff, chewing and smoking tobacco.

15. Starch and hair powder.

16. Lampblack and other painters' colors.

17. Gunpowder.

Besides manufactories of these articles, which are carried on as regular trades, and have attained to a considerable degree of maturity, there is a vast scene of household manufacturing which contributes more largely to the supply of the community than could be imagined

without having made it an object of particular inquiry. This observation is the pleasing result of the investigation to which the subject of this report has led, and is applicable as well to the southern as to the middle and northern States. Great quantities of coarse cloths, coatings, serges and flannels, linsey-woolseys, hosiery of wool, cotton and thread, coarse fustians, jeans and muslins, checked and striped cotton and linen goods, bedticks, coverlets and counterpanes, tow linens, coarse shirtings, sheetings, toweling and table linen, and various mixtures of wool and cotton, and of cotton and flax, are made in the household way, and in many instances to an extent not only sufficient for the supply of the families in which they are made, but for sale, and even in some cases for exportation. It is computed in a number of districts that two-thirds, three-fourths, and even four-fifths of all the clothing of the inhabitants are made by themselves. The importance of so great a progress as appears to have been made in family manufactures within a few years, both in a moral and political view, renders the fact highly interesting. . . .

A designation of the principal raw material of which each manufacture is composed will serve to introduce the remarks upon it; as, in the first place,

IRON

The manufactures of this article are entitled to pre-eminent rank. None are more essential in their kinds, nor so extensive in their uses. They constitute, in whole, or in part, the implements or the materials, or both, of almost every useful occupation. Their instrumentality is everywhere conspicuous.

It is fortunate for the United States that they have peculiar advantages for deriving the full benefit of this most valuable material and they have every motive to improve it with systematic care. It is to be found in various parts of the United States in great abundance, and of almost every quality; and fuel, the chief instrument in manufacturing it, is both cheap and plenty. This particularly applies to charcoal; but there are productive coal mines already in operation, and strong indications that the material is to be found in abundance in a variety of other places.

The inquiries to which the subject of this report has led have been answered with proofs, that manufactories of iron, though generally understood to be extensive, are far more so than is commonly supposed. The kinds in which the greatest progress has been made have been mentioned in another place, and need not be repeated; but there is

little doubt that every other kind, with due cultivation, will rapidly succeed. It is worthy of remark that several of the particular trades of which it is the basis are capable of being carried on without the aid of large capitals.

Iron works have greatly increased in the United States, and are prosecuted with much more advantage than formerly. The average price before the Revolution was about $64 per ton; at present it is about $80,— a rise which is chiefly to be attributed to the increase of manufactures of the material. . . .

Steel is a branch which has already made a considerable progress, and it is ascertained that some new enterprises on a more extensive scale have been lately set on foot. . . .

The United States already in a great measure supply themselves with nails and spikes. They are able, and ought certainly to do it entirely. The first and most laborious operation in this manufacture is performed by water-mills; and of the persons afterwards employed, a great proportion are boys, whose early habits of industry are of importance to the community, to the present support of their families, and to their own future comfort. It is not less curious than true that, in certain parts of the country, the making of nails is an occasional family manufacture. . . .

The implements of husbandry are made in several States in great abundance. In many places it is done by the common blacksmiths. And there is no doubt that an ample supply for the whole country can with great ease be procured among ourselves.

Various kinds of edged tools, for the use of mechanics, are also made; and a considerable quantity of hollow wares,— though the business of castings has not yet attained the perfection which might be wished. It is, however, improving, and as there are respectable capitals in good hands embarked in the prosecution of those branches of iron manufactories, which are yet in their infancy, they may all be contemplated as objects not difficult to be acquired. . . .

Fire-arms, and other military weapons, may, it is conceived, be placed without inconvenience in the class of articles rated at 15%. There are already manufactories of these articles, which only require the stimulus of a certain demand to render them adequate to the supply of the United States. . . .

Manufactures of steel generally, or of which steel is the article of chief value, may with advantage be placed in the class of goods rated at $7\frac{1}{2}$%. As manufactures of this kind have not yet made any considerable progress, it is a reason for not rating them as high

as those of iron; but as this material is the basis of them, and as their extension is not less practicable than important, it is desirable to promote it by a somewhat higher duty than the present. . . .

COPPER

The manufactures of which this article is susceptible are also of great extent and utility. Under this description, those of brass, of which it is the principal ingredient, are intended to be included.

The material is a natural production of the country. Mines of copper have actually been wrought, and with profit to the undertakers, though it is not known that any are now in this condition. And nothing is easier than the introduction of it from other countries on moderate terms and in great plenty.

Coppersmiths and brassfounders, particularly the former, are numerous in the United States,— some of whom carry on business to a respectable extent. . . .

LEAD

There are numerous proofs that this material abounds in the United States, and requires little to unfold it to an extent more than equal to every domestic occasion. A prolific mine of it has long been open in the southwestern parts of Virginia, and under a public administration, during the late war, yielded a considerable supply for military use. This is now in the hands of individuals, who not only carry it on with spirit, but have established manufactories of it at Richmond, in the same State. . . .

FOSSIL COAL

This, as an important instrument of manufactures, may without impropriety be mentioned among the subjects of this report. . . .

It is known that there are several coal mines in Virginia, now worked; and appearances of their existence are familiar in a number of places. . . .

WOOD

Several manufactures of this article flourish in the United States. Ships are nowhere built in greater perfection, and cabinet wares generally are made little, if at all, inferior to those of Europe. Their extent is such as to have admitted of considerable exportation. . . .

SKINS

There are scarcely any manufactories of greater importance than of this article. Their direct and very happy influence upon agricul-

ture, by promoting the raising of cattle of different kinds, is a very material recommendation.

It is pleasing, too, to observe the extensive progress they have made in their principal branches, which are so far matured as almost to defy foreign competition. Tanneries, in particular, are not only carried on as a regular business in numerous instances, and in various parts of the country, but they constitute, in some places, a valuable item of incidental family manufactures. . . .

GRAIN

Ardent spirits and malt liquors are, next to flour, the two principal manufactures of grain. The first has made a very extensive, the last a considerable progress in the United States. In respect to both, an exclusive possession of the home market ought to be secured to the domestic manufacturers, as fast as circumstances will admit. Nothing is more practicable, and nothing more desirable. . . .

The consumption of Geneva, or gin, in this country, is extensive. It is not long since distilleries of it have grown up among us to any importance. They are now becoming of consequence, but being still in their infancy, they require protection. . . .

FLAX AND HEMP

Manufactures of these articles have so much affinity to each other, and they are so often blended, that they may with advantage be considered in conjunction. The importance of the linen branch to agriculture; its precious effects upon household industry; the ease with which the materials can be produced at home to any requisite extent; the great advances which have been already made in the coarser fabrics of them, especially in the family way, — constitute claims of peculiar force to the patronage of government. . . .

COTTON

There is something in the texture of this material which adapts it in a peculiar degree to the application of machines. The signal utility of the mill for spinning of cotton, not long since invented in England, has been noticed in another place; but there are other machines scarcely inferior in utility, which, in the different manufactories of this article, are employed either exclusively or with more than ordinary effect. This very important circumstance recommends the fabrics of cotton in a more particular manner to a country in which a defect of hands constitutes the greatest obstacle to success.

The variety and extent of the uses to which the manufactures of

this article are applicable is another powerful argument in their favor.

And the faculty of the United States to produce the raw material in abundance and of a quality which, though alleged to be inferior to some that is produced in other quarters, is nevertheless capable of being used with advantage in many fabrics, and is probably susceptible of being carried by a more experienced culture to much greater perfection, suggests an additional and a very cogent inducement to the vigorous pursuit of the cotton branch in its several subdivisions. . . .

Manufactories of cotton goods not long since established at Beverly, in Massachusetts, and at Providence, in the State of Rhode Island, and conducted with a perseverance corresponding with the patriotic motives which began them, seem to have overcome the first obstacles to success, — producing corduroys, velverets, fustians, jeans, and other similar articles, of a quality which will bear a comparison with the like articles brought from Manchester. The one at Providence has the merit of being the first in introducing into the United States the celebrated cotton mill, which not only furnishes materials for that manufactory itself, but for the supply of private families for household manufacture.

Other manufactories of the same material as regular businesses have also been begun at different places in the State of Connecticut, but all upon a smaller scale than those above mentioned. Some essays are also making in the printing and staining of cotton goods. There are several small establishments of this kind already on foot.

WOOL

In a country the climate of which partakes of so considerable a proportion of winter as that of a great part of the United States, the woollen branch cannot be regarded as inferior to any which relates to the clothing of the inhabitants.

Household manufactures of this material are carried on in different parts of the United States to a very interesting extent, but there is only one branch which as a regular business can be said to have acquired maturity. This is the making of hats.

Hats of wool, and of wool mixed with fur, are made in large quantities in different States, and nothing seems wanting but an adequate supply of materials to render the manufacture commensurate with the demand.

A promising essay towards the fabrication of cloths, cassimeres

and other woollen goods, is likewise going on at Hartford, in Connecticut. Specimens of the different kinds which are made, in the possession of the secretary, evince that these fabrics have attained a very considerable degree of perfection. Their quality certainly surpasses anything that could have been looked for in so short a time and under so great disadvantages, and conspires with the scantiness of the means which have been at the command of the directors to form the eulogium of that public spirit, perseverance and judgment which have been able to accomplish so much. . . .

SILK

The production of this article is attended with great facility in most parts of the United States. Some pleasing essays are making in Connecticut as well towards that as towards the manufacture of what is produced. Stockings, handkerchiefs, ribbons and buttons are made, though as yet but in small quantities.

A manufactory of lace, upon a scale not very extensive, has been long memorable at Ipswich, in the State of Massachusetts. . . .

GLASS

The materials for making glass are found everywhere. In the United States there is no deficiency of them. . . .

GUNPOWDER

No small progress has been of late made in the manufacture of this very important article. It may, indeed, be considered as already established, but its high importance renders its further extension very desirable. . . .

PAPER

Manufactories of paper are among those which are arrived at the greatest maturity in the United States, and are most adequate to national supply. That of paper-hangings is a branch in which respectable progress has been made. . . .

PRINTED BOOKS

The great number of presses disseminated throughout the Union seem to afford an assurance that there is no need of being indebted to foreign countries for the printing of the books which are used in the United States. . . .

REFINED SUGARS AND CHOCOLATE

Are among the number of extensive and prosperous domestic manufactures. . . .

There is reason to believe that the progress of particular manufactures has been much retarded by the want of skillful workmen. And it often happens that the capitals employed are not equal to the purposes of bringing from abroad workmen of a superior kind. Here, in cases worthy of it, the auxiliary agency of Government would in all probability be useful. There are also valuable workmen in every branch who are prevented from emigrating solely by the want of means. Occasional aids to such persons, properly administered, might be a source of valuable acquisitions to the country.

The propriety of stimulating by rewards the invention and introduction of useful improvements, is admitted without difficulty. . . .

G. *Progress of Manufactures, 1793*[1]

The distance of the United States from Europe and the consequent cost of carriage of foreign goods gave to domestic manufactures a species of protection which Coxe estimates at not less than twenty-five per cent. When to this were added the possession of cheap raw materials and the inventive genius of the American people, a good case could be made to prove the success of manufactures in the United States. At this juncture, however, the European wars gave to our agriculture and commerce such an opportunity for profit that there was little inducement to embark capital in a doubtful manufacturing enterprise. Coxe wrote and worked earnestly on behalf of manufactures.

The value of the manufactures of the United States is certainly greater than double the value of their exports in native commodities.

The value of the manufactures of the United States is much greater than the gross value of all their imports, including the value of goods exported again.

The manufactures of the United States consist generally of articles of comfort, utility, and necessity. Articles of luxury, elegance, and show, are not manufactured in America, excepting a few kinds.

The manufactures of the United States have increased very rapidly since the commencement of the revolutionary war, and particularly in the last five years.

Household manufactures are carried on within the families of almost all the farmers and planters, and of a great proportion of the inhabitants of the villages and towns. This practice is increasing under the animating influences of private interest and public spirit. . . .

The people of the United States are ingenious in the invention,

[1] *A View of the United States of America.* By Tench Coxe (Philadelphia, 1794), 430, 440.

and prompt, and accurate in the execution, of mechanism and workmanship, for purposes in science, arts, manufactures, navigation, and agriculture. Rittenhouse's planetarium, Franklin's electrical conductor, Godfrey's quadrant improved by Hadley, Rumsey's and Fitch's steam-engines, Leslie's rod pendulum and other horological inventions, the construction of ships, the New-England whale-boat, the construction of flour mills, the wire-cutter and bender for card makers, Folsom's and Brigg's machinery for cutting nails out of rolled iron, the Philadelphia dray with an inclined plane, Mason's engine for extinguishing fire, the Connecticut steeple clock, which is wound up by the wind, the Franklin fireplace, the Rittenhouse stove, Anderson's threshing machine, Rittenhouse's instrument for taking levels, Donaldson's hippopotamos and balance lock, and Wynkoop's underlators, are a few of the numerous examples.

H. *Decline of Manufactures, 1795* [1]

The decline of manufactures a few years after the publication of Hamilton's report, for the reasons already cited, is evident from the tone of Winterbotham's comment, which discusses the expediency of encouraging them.

We now come to the subject of manufactures, the expediency of encouraging of which in the United States, was not long since deemed very questionable, but the advantages of which, appear at this time to be generally admitted. The embarrassments which have obstructed the progress of their external trade with European nations, have led them to serious reflections on the necessity of enlarging the sphere of their domestic commerce; the restrictive regulations which in foreign markets have abridged the vent of the increasing surplus of their agricultural produce, have served to beget in them an earnest desire, that a more extensive demand for that surplus may be created at home: And the complete success which has rewarded manufacturing enterprise, in some valuable branches, conspiring with the promising symptoms which attend some less mature essays in others, justify a hope, that the obstacles to the growth of this species of industry are less formidable than they were apprehended to be; and that it is not difficult to find, in its further extension, a full indemnification for any external disadvantages, which are or may be experienced, as well as an accession of resources, favourable to national independence and safety.

[1] *An Historical, Geographical, Commercial, and Philosophical View of the American United States.* By W. Winterbotham (London, 1795), I, 293.

I. *Domestic Manufactures in the Back Country, 1807* [1]

In those sections of the country which, by reason of their distance from a market, were unable to share in the trade with Europe and receive English manufactures in return for their agricultural staples, domestic manufactures persisted. In fact there was very little change in the back districts of the country from colonial conditions.

While agriculture is so much attended to, and the means of engaging in it so easy, it is not surprising that few direct their attention to manufactures. Some years ago a cotton manufactory was established near Statesborough [South Carolina], which bid fair to rise into consideration. It was, however, soon perceived that the price of labour was too great to permit its goods to stand any competition with those of similar qualities imported from Great Britain: consequently the proprietors were obliged to discontinue their operations. A numerous population and scarcity of lands must first be experienced in a country before its inhabitants will resort to manufactures, while a more eligible mode of subsistence exists. In the upper country, however, necessity has obliged the inhabitants to provide for their respective wants from their own resources, in consequence of the difficulty and expense of conveying bulky articles from the sea-coast to the interior. The traveller there soon becomes accustomed to the humming music of the spinning-wheel and the loom. Cottons and woollens of various descriptions are made in sufficient quantities for domestic use; and if we except the articles of salt and sugar, the people in the upper parts of the state may be considered independent of foreign support; for carpenters, smiths, masons, tanners, shoemakers, sadlers, hatters, millwrights, and other tradesmen, are conveniently situated throughout the country; and the materials necessary for their respective professions are met with in abundance.

II. Condition of the People

A. *American Characteristics, 1816* [2]

The characterizations of American abilities and manners during this formative period are as varied as the experiences of the various writers. Brissot was charmed with the simplicity of morals and lack of poverty; Michaux comments on the

[1] *Travels through Canada, and the United States of North America, in the Years 1806, 1807, & 1808.* By John Lambert (2d edition, London, 1814), II, 211–2.

[2] *America and her Resources.* By John Bristed (London, 1818), 431–7.

prosperity of the people, while Weld complains of their lack of manners. Probably there was truth in each of these impressions. Bristed mingles praise and blame in a fairly impartial manner.

There is no striking difference in the general deportment and appearance of the great body of Americans *in the towns*, from Norfolk in Virginia, to Madison in Indiana. The same well-looking, well-dressed, tall, stout men, appear every where pretty much at their ease, shrewd and intelligent, and not too industrious. When asked why they do not employ themselves? they answer, "we live in freedom, we need not work like the English;" as if idleness itself were not the worst species of slavery. In the *country* are to be found several backwoodmen, who are savage and fierce, and view newcomers as intruders. They, however, must quickly yield to the rapid growth of civilization. The great body of the western settlers are, beyond all comparison, superior to the European farmers and peasantry in manners and habits, in physical capacity, and abundance, and above all, in intelligence and political independence.

The activity and enterprise of the Americans far exceed those of any other people. Travellers continually are setting out on journeys of two or three thousand miles, by boats, on horses, or on foot, without any apparent anxiety or deliberation. Nearly a thousand persons every summer pass down the Ohio as traders or boatmen, and return on foot; a distance by water of seventeen hundred, by land, of a thousand miles. . . .

Learning, taste, and science, of course, have not yet made much headway in the west; their reading is, in general, confined to newspapers and political pamphlets, a little history, and less religion; but their intellects are keen, vigorous, and active. . . .

The high wages of labour, the abundance of every kind of manual and mechanical employment, the plenty of provisions, the vast quantity and low price of land, all contribute to produce a healthy, strong, and vigorous population. Four-fifths of our people are engaged in agricultural pursuits, and the great majority of these are proprietors of the soil which they cultivate. In the intervals of toil their amusements consist chiefly of hunting and shooting, in the woods, or on the mountains; whence they acquire prodigious muscular activity and strength. . . .

Thus the people of the United States possess, in an eminent degree, the *physical* elements of national greatness and strength. Add to these, the general prevalence of elementary instruction, which enables the great mass of the people to develope their natural faculties and

powers, and capacitates them for undertaking any employment, success in which depends upon shrewdness, intelligence, and skill; whence their singular ingenuity in mechanical and manual operations, and their sound understanding, enterprise, and perseverance in the practical concerns of life. And to crown all, the *political sovereignty* of the nation residing in the people, gives them a personal confidence, self-possession, and elevation of character, unknown and unattainable in any other country, and under any other form of government; and which renders them quick to perceive, and prompt to resent and punish any insult offered to individual or national honour. Whence in the occupations of peace, and the achievements of war, the Americans average a greater aggregate of effective force, physical, intellectual, and moral, than ever has been exhibited by a given number of any other people, ancient or modern. Individuals, in other countries, may, and do exhibit as much bodily activity and strength, as much intellectual acuteness and vigour, as much moral force and elevation, as can be shown forth by any American individuals; but no country *can* display such a population, *in mass*, as are now quickening the United States with their prolific energy, and ripening fast into a substance of power, every movement of which will soon be felt in its vibrations to the remotest corners of the earth. . . .

There are, however, drawbacks upon the high elements of national greatness above enumerated, to be found in some of our political and social institutions. For example, *slavery* demoralizes the southern, and those of the western states, which have adopted this execrable system. *Lotteries* pervade the middle, southern, and western states, and spread a horribly increasing mass of idleness, fraud, theft, falsehood, and profligacy throughout all the classes of our labouring population. . . . Our favourite scheme of substituting a *state prison* for the gallows is a most prolific mother of crime. During the severity of the winter season, its lodgings and accommodations are better than those of many of our paupers, who are thereby incited to crime in order to mend their condition. And the pernicious custom of *pardoning* the most atrocious criminals, after a short residence in the state-prison, is continually augmenting our flying squadrons of murderers, house-breakers, foot-pads, forgers, highway robbers, and swindlers of all sorts. . . .

Our state insolvent laws, likewise (for we are too patriotic to permit Congress to pass an uniform bankrupt law, that might compel our merchants to pay their *foreign* creditors), acts as a perpetual bounty for dishonesty and fraud. . . .

The *poor-law* system, as an awful encouragement to pauperism and profligacy, requires no further comment. With the exception of *forgery*, in the ingenuity and audacity of which our *native* Americans far surpass all other people, and for which our state-prisons do not afford even a palliative, much less a remedy, the *foreigners* and free blacks are the most numerous and atrocious of our criminals. . . .

The prevailing vice throughout the Union, excepting New-England, is *immoderate drinking;* encouraged doubtless by the relaxing heats of the climate, in the southern, middle, and western states, by the high wages of labour, and by the absence of all restriction, in the shape of excise, or internal duty. Not only our labourers generally, but too many of our farmers, merchants, and other classes of the community, are prone to a pernicious indulgence in spirituous liquors.

B. *Wages and Cost of Living, 1802* [1]

As Michaux shows here, not merely were money or nominal wages high, but real wages, or wages measured by the commodities which could be purchased with them, were even higher. Under these circumstances the position of the laborer was a fortunate one, and his standard of living was high.

The articles manufactured at Lexinton are very passable, and the speculators are ever said to make rapid fortunes, notwithstanding the extreme scarcity of hands. This scarcity proceeds from the inhabitants giving so decided a preference to agriculture, that there are very few of them who put their children to any trade, wanting their services in the field. The following comparison will more clearly prove this scarcity of artificers in the western states: At Charleston in Carolina, and at Savannah in Georgia, a cabinet-maker, carpenter, mason, tinman, tailor, shoemaker, &c. earns two piastres [dollars] a day, and cannot live for less than six per week; at New York and Philadelphia he has but one piastre, and it costs him four per week. At Marietta, Lexinton, and Nasheville, in Tenessea, these workmen earn from one piastre to one and a half a day, and can subsist a week with the produce of one day's labour. Another example may tend to give an idea of the low price of provisions in the western states. The boarding house, where I lived during my stay at Lexinton passes for one of the best in the town, and we were profusely served at the rate of two piastres per week. I am informed that living is equally

[1] *Travels to the Westward of the Allegany Mountains.* By F. A. Michaux (London, 1805), 124–5.

cheap in the states of New England, which comprise Connecticut, Massachusetts, and New Hampshire; but the price of labour is not so high, and therefore more proportionate to the price of provisions.

C. *Unwholesome Dietary, 1797* [1]

Travelers in the United States during this period are almost unanimous in their descriptions of the bountiful yet heavy diet spread on the typical American table, especially of the hot breads and salt meats, to the consumption of which they attributed various ills, from whooping cough to premature loss of teeth. Volney was a Frenchman who traveled in this country between 1795 and 1798.

I will venture to say that, if a prize were proposed for the scheme of a regimen most calculated to injure the stomach, the teeth, and the health in general, no better could be invented than that of the Americans. In the morning at breakfast, they deluge their stomach with a quart of hot water, impregnated with tea, or so slightly with coffee, that it is mere coloured water: and they swallow, almost without chewing, hot bread, half baked, toast soaked in butter, cheese of the fattest kind, slices of salt or hung beef, ham, &c., all which are nearly insoluble. At dinner they have boiled pastes under the name of puddings, and the fattest are esteemed the most delicious: all their sauces, even for roast beef, are melted butter: their turnips and potatoes swim in hog's lard, butter, or fat: under the name of pie, or pumpkin, their pastry is nothing but a greasy paste, never sufficiently baked: to digest these viscous substances, they take tea almost instantly after dinner, making it so strong, that it is absolutely bitter to the taste; in which state it affects the nerves so powerfully, that even the English find it brings on a more obstinate restlessness than coffee. Supper again introduces salt meats, or oysters: as Chatelux says, the whole day passes in heaping indigestions on one another: and to give tone to the poor relaxed and wearied stomach, they drink Madeira, rum, French brandy, gin, or malt spirits, which complete the ruin of the nervous system.

D. *Intemperance, 1802* [2]

The consumption of liquors was universal at the beginning of the nineteenth century, and even their intemperate use was regarded with a degree of tolerance that would strike us as strange today. Michaux was a very careful and trustworthy observer.

[1] *View of the Climate and Soil of the United States of America.* By C. F. Volney (London, 1804), 323–5.

[2] *Travels to the Westward of the Allegany Mountains.* By F. A. Michaux (London, 1805), 40.

. . . A passion for spirituous liquors is one of the features that characterise the country people belonging to the interior of the United States. This passion is so strong, that they desert their homes every now and then to get drunk in public houses; in fact, I do not conceive that there are ten out of a hundred who have resolution enough to desist from it a moment provided they had it by them, notwithstanding their usual beverage in summer is nothing but water, or sour milk. They care very little for cyder, which they find too weak. Their dislike to this wholesome and pleasant beverage is the more distressing as they might easily procure it at a very trifling expense, for apple trees of every kind grow to wonderful perfection in this country.

E. *Education, 1816* [1]

The grant of public lands in support of the common schools insured the development of educational opportunities for the mass of the people. Even at this early period, when the public-school system was as yet undeveloped, a firm foundation was being laid. Warden was at one time consul for the United States at Paris.

The education of youth, which is so essential to the well-being of society, and to the development of national wealth, has always been a primary object of public attention, in the United States. Since the year 1800, especially, great additions have been made to the number of schools and academical institutions; to the funds for supporting them, and to all the means for providing instruction, and disseminating information. In 1809 the number of colleges had increased to twenty-five, that of academies to seventy-four. Those institutions are incorporated by the legislature of each state, and are subject to its inspection, though placed respectively under the direction of boards of trustees. . . .

In the western states congress have reserved 640 acres of the public land in each township for the support of schools, besides seven entire townships of 23,040 acres each, two of which are situated in the state of Ohio, and one in each of the states and territories of Michigan, Indiana, Illinois, Mississippi, and Louisiana. In the state of New York in 1811, the fund for common schools, subject to the disposal of the legislature, amounted to half a million of dollars, giving an annual revenue of 36,000 dollars. . . . Throughout the New England states the schools are supported by a public tax, and are under the direction of a committee. In these seminaries the poor

[1] *A Statistical, Political, and Historical Account of the United States of North America.* By D. B. Warden (Edinburgh, 1819), III, 453–8, *passim.*

and the rich are educated together, and are taught reading, writing, arithmetic, grammar, and geography. In other parts of the Union also, schools are provided for the education of the poorer class. The system of Lancaster has been lately adopted in different places. Various societies have been lately established, for the advancement of knowledge; particularly of those branches which are connected with agriculture, arts, and manufactures. . . .

The newspaper press is the great organ of communication in America. In this description of literature, the United States are entitled to take precedence of all other countries, at least so far as relates to number. In the beginning of the year 1810 there were 364 newspapers in the United States, 25 of which were printed daily, 16 thrice a-week, 33 twice, and 262 weekly.[1] Before the American revolution there were but nine newspapers in the United States.

F. *Post-offices and Rates, 1791–1816*[2]

The educational value of the post office was early recognized, and the postal system was inaugurated in 1775, and greatly extended after 1789. The principle of a flat rate for all letters irrespective of distance or weight was not introduced until 1850.

By the Constitution, Congress have power to establish post-offices and post-roads: and soon after the commencement of the Government, laws were passed, tc carry this power into effect.

The benefits arising from the post-office establishment, to individuals are immense, and in some years, the public have derived no inconsiderable revenue from this source. . . .

From this will be seen the increase of the establishment at the following periods —

Year	No. of post-offices	Net revenue Dolls. Cts.	Extent in miles of post-roads
1791	89	9,637 29	1,905
1801	1,025	65,291 84	22,309
1811	2,403	88,148 51	37,035
1816	3,260	156,579	48,976

[1] There are 8 in German, 5 in French, and 2 in Spanish.

[2] *Statistical Annals . . . of the United States.* By Adam Seybert (Philadelphia, 1818), 372–3.

Rates of Postage established in 1816,[1] *viz.:*

For every letter composed of a single sheet of paper, conveyed not exceeding	30	miles				6	cents
Do. over	30	and not exceeding	80	miles		10	do.
Do.	80	do.	150	do.		12½	do.
Do.	150	do.	400	do.		18½	do.
Do. over	400	miles				25	do.

For every double letter, or letter composed of two pieces of paper, double those rates; and for every triple letter, or one composed of three pieces of paper, triple those rates; and for every packet composed of four or more pieces of paper, or one or more other articles, and weighing one ounce avoirdupois, quadruple those rates, and in that proportion for all greater weights; provided that no packet of letters conveyed by the water-mails, shall be charged with more than quadruple postage, unless the same shall contain more than four distinct letters.

[1] Act 9th April, 1816.

CHAPTER IX

THE DEVELOPMENT OF MANUFACTURES, 1800–1860

I. General View of Manufactures, 1810–1860

A. *Gallatin's Report on Manufactures, 1810* [1]

In 1806 and 1807, both Great Britain and France had restricted American commerce, the former by Orders in Council, the latter by the Berlin and Milan Decrees. The United States had retaliated in 1807 with the Embargo Act, which prohibited the vessels of this country trading with either Great Britain or France. Naturally much of the capital previously invested in shipping found its way into manufactures. Pursuant to a request of Congress, Albert Gallatin, secretary of the treasury, reported in April, 1810, on the state of manufactures in the United States. The more important parts of this report are:

The following manufactures are carried on to an extent which may be considered adequate to the consumption of the United States, the foreign articles annually imported being less in value than those of American manufacture belonging to the same general class, which are annually exported, viz.:

Manufactures of wood, or of which wood is the principal material.
Leather, and manufactures of leather.
Soap, and tallow candles.
Spermaceti oil and candles.
Flaxseed oil.
Refined sugar.
Coarse earthen ware.
Snuff, chocolate, hair powder, and mustard.

The following branches are firmly established, supplying, in several instances, the greater, and, in all, a considerable, part of the consumption of the United States, viz.:

Iron, and the manufactures of iron.
Manufactures of cotton, wool, and flax.
Hats.
Paper, printing types, printed books, playing cards.
Spirituous and malt liquors.
Several manufactures of hemp.
Gunpowder.
Window glass.
Jewelry and clocks.
Several manufactures of lead.
Straw bonnets and hats.
Wax candles.

[1] Gallatin's *Report on Manufactures, 1810.* American State Papers (Washington, 1834), Series Finance, II, 425–7.

Progress has also been made in the following branches, viz.:

Paints and colors, several chemical preparations and medicinal drugs, salt, manufactures of copper and brass, japanned and plated ware, calico printing, queens and other earthen and glass wares, &c. . . .

LEATHER, AND MANUFACTURES OF LEATHER

Tanneries are established in every part of the United States, some of them on a very large scale — the capital employed in a single establishment amounting to one hundred thousand dollars. A few hides are exported, and it is stated that one-third of those used in the great tanneries of the Atlantic States are imported from Spanish America. Some superior or particular kinds of English leather and morocco are still imported; but about 350,000 pounds of American leather are annually exported. The bark is abundant and cheap; and it seems, . . . that hides cost, in America, $5\frac{1}{2}$ cents, and in England, seven cents a pound; that the bark used for tanning, costs, in England, nearly as much as the hides, and in America not one-tenth part of that sum. It is, at the same time, acknowledged, that much American leather is brought to market, of an inferior quality, and that better is generally made in the middle than in the Northern or Southern States. The tanneries of the State of Delaware employ, collectively, a capital of one hundred and twenty thousand dollars, and ninety workmen, and make, annually, one hundred thousand dollars' worth of leather. Those of Baltimore amount to twenty-two, seventeen of which have, together, a capital of 187,000 dollars, and tan, annually, 19,000 hides, and 25,000 calf skins.

Morocco is also made in several places, partly from imported goat skins, and principally from sheep skins. And it may be proper here to add, that deer skins, which form an article of exportation, are dressed and manufactured in the United States, to the amount required for the consumption of the country.

The principal manufactures of leather are those of shoes and boots, harness and saddles. Some inconsiderable quantities of the two last articles are both imported and exported. The annual importation of foreign boots and shoes, amounts to 3,250 pair boots and 59,000 pair of shoes, principally kid and morocco. The annual exportation of the same articles, of American manufacture, to 8,500 pair of boots and 127,000 pair of shoes. The shoe manufactures of New Jersey are extensive. That of Lynn, in Massachusetts, makes 100,000 pair of women's shoes annually.

The value of all the articles annually manufactured in the United States, which are embraced under this head, (leather) may be estimated at twenty millions of dollars. . . .

COTTON, WOOL, AND FLAX

I. Spinning Mills and Manufacturing Establishments.

Returns have been received of eighty-seven mills, which were erected at the end of the year 1809; sixty-two of which (forty-eight, water, and fourteen, horse, mills) were in operation, and worked, at that time, thirty-one thousand spindles. The other twenty five will all be in operation in the course of this year, and, together with the former ones, (almost all of which are increasing their machinery) will, by the estimate received, work more than eighty thousand spindles at the commencement of the year 1811.

The capital required to carry on the manufacture, on the best terms, is estimated at the rate of one hundred dollars for each spindle; including both the fixed capital applied to the purchase of the mill-seats, and to the construction of the mills and machinery, and that employed in wages, repairs, raw materials, goods on hand, and contingencies. But it is believed that no more than at the rate of sixty dollars for each spindle is generally actually employed. Forty-five pounds of cotton, worth about 20 cents a pound, are, on an average, annually used for each spindle; and these produce about thirty-six pounds of yarn, of different qualities, worth, on an average, one dollar and twelve and a half cents a pound. Eight hundred spindles employ forty persons, viz.: five men and thirty-five women and children. . . .

Some of the mills, above mentioned, are also employed in carding and spinning wool, though not to a considerable amount. But almost the whole of that material is spun and wove in private families; and there are yet but few establishments for the manufacture of woollen cloths. Some information has, however, been received, respecting fourteen of these, . . . manufacturing, each, on an average, ten thousand yards of cloth a year, worth from one to ten dollars a yard. It is believed that there are others, from which no information has been obtained; and it is known that several establishments, on a smaller scale, exist in Philadelphia, Baltimore, and some other places. All those cloths, as well as those manufactured in private families, are generally superior in quality, though somewhat inferior in appearance, to imported cloths of the same price. The principal obstacle to the extension of the manufacture is the

want of wool, which is still deficient, both in quality and quantity. But those defects are daily and rapidly lessened, by the introduction of sheep of the merino and other superior breeds; by the great demand for the article; and by the attention now every where paid by farmers to the increase and improvement of their flocks.

Manufacturing establishments, for spinning and weaving flax, are yet but few. In the State of New York, there is one, which employs a capital of 18,000 dollars, and twenty-six persons, and in which about ninety thousand pounds of flax are annually spun and wove, into canvass and other coarse linen. Information has been received respecting two, in the vicinity of Philadelphia, one of which produces, annually, 72,000 yards of canvass, made of flax and cotton; in the other, the flax is both hackled and spun by machinery; thirty looms are employed; and it is said that 500,000 yards of cotton bagging, sail cloth, and coarse linen, may be made annually. . . .

II. Household Manufactures

But by far the greater part of the goods made of those materials, (cotton, flax, and wool,) are manufactured in private families, mostly for their own use, and partly for sale. They consist principally of coarse cloth, flannel, cotton stuffs, and stripes of every description, linen, and mixtures of wool with flax or cotton. The information received from every State, and from more than sixty different places, concurs in establishing the fact of an extraordinary increase, during the two last years, and in rendering it probable that about two-thirds of the clothing, including hosiery, and of the house and table linen, worn and used by the inhabitant of the United States, who do not reside in cities, is the product of family manufactures.

In the Eastern and Middle States, carding machines, worked by water, are every where established, and they are rapidly extending southwardly and westwardly. Jennies, other family spinning machines, and flying shuttles, are also introduced in many places; and as many fulling mills are erected as are required for finishing all the cloth which is woven in private families. . . .

IRON, AND MANUFACTURES OF IRON

The information received respecting that important branch is very imperfect. It is, however, well known, that iron ore abounds, and that numerous furnaces and forges are erected, throughout the United States. They supply a sufficient quantity of hollow ware, and of castings, of every description; but about 4,500 tons of bar

iron are annually imported from Russia, and probably, an equal quantity from Sweden and England together. A vague estimate states the amount of bar iron annually used in the United States, at fifty thousand tons, which would leave about forty thousand for that of American manufacture. Although a great proportion of the ore found in Vermont, Pennsylvania, Maryland, and Virginia, be of a superior quality, and some of the iron manufactured there, equal to any imported, it is to be regretted, that, from the demand, and from want of proper attention in the manufacture, much inferior American iron is brought to market. On that account, the want of the ordinary supply of Russian iron has been felt in some of the slitting and rolling mills. But, whilst a reduction of the duty on Russian iron is asked from several quarters, it is generally stated that a high or prohibitory duty on English bar, slit, rolled, and sheet iron, would be beneficial; that which is usually imported on account of its cheapness, being made with pit coal, and of a very inferior quality.

The annual importations of sheet, slit, and hoop iron, amount to five hundred and sixty-five tons; and the quantity rolled and slit in the United States, is estimated at seven thousand tons. In the State of Massachusetts alone, are found thirteen rolling and slitting mills, in which about 3,500 tons of bar iron, principally from Russia, are annually rolled or slit. A portion is used for sheet iron and nail rods for wrought nails; but two-thirds of the whole quantity of bar iron flattened by machinery in the United States, is used in the manufacture of *cut nails*, which has now extended throughout the whole country, and, being altogether an American invention, substituting machinery to manual labor, deserves particular notice. . . . [T]he annual product of that branch alone, may be estimated at twelve hundred thousand dollars, and that, exclusively of the saving of fuel, the expense of manufacturing cut nails, is not one-third part of that of forging wrought nails. About two hundred and eighty tons are already annually exported, but the United States continue to import, annually, more than fifteen hundred tons of wrought nails and spikes. An increase of duty on these, and a drawback on the exportation of the cut nails is generally asked for.

A considerable quantity of blistered, and some refined steel, are made in America; but the foreign importations exceed 11,000 cwt. a year.

The manufactures of iron consist principally of agricultural implements, and of all the usual work performed by common blacksmiths. To these may be added anchors, shovels, and spades,

axes, scythes, and other edge tools, saws, bits, and stirrups, and a great variety of the coarser articles of ironmongery; but cutlery, and all the finer species of hardware, and of steel work, are almost altogether imported from Great Britain. Balls, shells, and cannon, of small caliber, are cast in several places; and three foundries for casting solid, those of the largest caliber, together with the proper machinery for boring and finishing them, are established at Cecil county, Maryland, near the city of Washington, and at Richmond, in Virginia; each of the two last may cast 300 pieces of artillery a year, and a great number of iron and brass cannon are made at that, near the seat of Government. Those of Philadelphia and near the Hudson river, are not now employed. It may be here added, that there are several iron foundries for casting every species of work wanted for machinery, and that steam engines are made at that of Philadelphia.

At the two public armories of Springfield and Harper's ferry, 19,000 muskets are annually made. About 20,000 more are made at several factories, of which the most perfect is said to be that near New Haven, and which, with the exception of that erected at Richmond by the State of Virginia, are all private establishments. These may, if wanted, be immediately enlarged, and do not include a number of gunsmiths employed in making rifles, and several other species of arms. Swords and pistols are also manufactured in several places.

Although it is not practicable to make a correct statement of the value of all the iron and manufactures of iron, annually made in the United States, it is believed to be from twelve to fifteen millions of dollars. The annual importations from all foreign countries, including bar iron, and every description of manufactures of iron or steel, are estimated at near four millions of dollars. . . .

From that imperfect sketch of American manufactures, it may, with certainty, be inferred that their annual produce exceeds one hundred and twenty millions of dollars. And it is not improbable that the raw materials used, and the provisions and other articles consumed, by the manufacturers, create a home market for agricultural products not very inferior to that which arises from foreign demand. A result more favorable than might have been expected from a view of the natural causes which impede the introduction, and retard the progress of manufactures in the United States.

The most prominent of those causes are the abundance of land compared with the population, the high price of labor, and the want of a sufficient capital. The superior attractions of agricultural pursuits, the great extension of American commerce during the late

European wars, and the continuance of habits after the causes which produced them have ceased to exist, may also be enumerated. Several of those obstacles have, however, been removed or lessened. The cheapness of provisions had always, to a certain extent, counterbalanced the high price of manual labor; and this is now, in many important branches, nearly superseded by the introduction of machinery; a great American capital has been acquired during the last twenty years; and the injurious violations of the neutral commerce of the United States, by forcing industry and capital into other channels, have broken inveterate habits, and given a general impulse, to which must be ascribed the great increase of manufactures during the two last years.

B. *Leading Manufactures in 1840* [1]

In 1840 the leading manufactures were of cottons, woolens and machinery. The table on the opposite page shows the extent of the manufactures of these commodities for the various states.

C. *View of Manufactures in 1860* [2]

By 1860 the manufactures of the United States employed over 1,250,000 persons, and turned out products to the value of approximately two billion dollars. According to the census of that year the condition of the leading manufacturing industries was as follows:

PRODUCTS OF INDUSTRY

The returns of MANUFACTURES exhibit a most gratifying increase, and present at the same time an imposing view of the magnitude to which this branch of the national industry has attained within the last decennium.

The total value of domestic manufactures, (including fisheries and the products of the mines,) according to the Census of 1850, was $1,019,106,616. The product of the same branches for the year ending June 1, 1860, as already ascertained in part and carefully estimated for the remainder, will reach an aggregate value of *nineteen hundred millions of dollars* (1,900,000,000). This result exhibits *an increase of more than eighty-six* (86) *per centum in ten years!* The growth of this branch of American labor appears, therefore, to have been in much greater ratio than that of the population. Its increase has been 123 per cent. greater than that even of the white population

[1] Adapted from the *Sixth Census*, 1840.

[2] *Preliminary Report on the Eighth Census, 1860.* (Washington, 1862), 59–69.

ADAPTED FROM SIXTH CENSUS, 1840	MACHINERY		WOOLEN GOODS				COTTON GOODS				
	Value of Product	No. of Men Employed	No. of Factories	Value of Product	No. of Persons Employed	Capital Invested	No. of Factories	No. of Spindles	Value of Product	No. of Persons Employed	Capital Invested
Maine	$69,752	339	24	412,366	532	316,105	6	29,736	970,397	1,414	1,398,000
New Hampshire	106,814	191	66	795,784	893	740,345	58	195,173	4,142,304	6,991	5,523,200
Massachusetts	926,975	913	144	7,082,898	5,076	4,179,850	278	665,095	16,553,423	20,928	17,414,099
Rhode Island	437,100	534	41	842,172	961	685,350	209	518,817	7,116,792	12,086	7,326,000
Connecticut	319,680	335	119	2,494,313	2,356	1,931,335	116	181,319	2,715,964	5,153	3,152,000
Vermont	101,354	87	95	1,331,953	1,450	1,406,950	7	7,254	113,000	262	118,100
New York	2,895,517	3,631	323	3,537,337	4,636	3,469,349	117	211,059	3,640,237	7,407	4,900,772
New Jersey	755,050	932	31	440,710	427	314,650	43	63,744	2,086,104	2,408	1,722,810
Pennsylvania	1,998,152	1,973	235	2,319,061	2,930	1,510,546	106	146,494	5,013,007	5,522	3,325,400
Delaware	314,500	299	2	104,700	83	107,000	11	24,492	332,272	566	330,500
Maryland	348,165	723	29	235,900	388	117,630	21	41,182	1,150,580	2,284	1,304,400
Virginia	429,858	445	41	147,792	222	112,350	22	42,262	446,063	1,816	1,299,020
North Carolina	43,285	89	3	3,900	4	9,800	25	47,934	438,900	1,219	995,300
South Carolina	65,561	127	3	1,000	6	4,300	15	16,355	359,000	570	617,450
Georgia	131,238	184	1	3,000	10	2,000	19	42,589	304,342	779	573,835
Alabama	131,825	96	.....	.....	.....	.....	14	1,502	17,547	82	35,575
Mississippi	242,225	274	.....	.....	.....	.....	53	318	1,744	81	6,420
Louisiana	5,000	.....	.....	.....	.....	.....	2	706	18,900	23	22,000
Tennessee	257,704	266	26	14,290	45	25,600	38	16,813	325,719	1,542	463,240
Kentucky	46,074	149	40	151,246	200	138,000	58	12,358	329,380	523	316,113
Ohio	875,731	858	130	685,757	935	537,985	8	13,754	139,378	246	113,500
Indiana	123,808	120	37	58,867	103	77,954	12	4,985	135,400	210	142,500
Illinois	37,720	71	16	9,540	34	26,205	.....	.....	.....	.....	.....
Missouri	190,412	191	9	13,750	13	5,100	.....	.....	.....	.....	.....
Arkansas	14,065	51	1	129	1	12,600	2	90	.....	7	2,125
Michigan	47,000	67	4	9,734	37	34,120	.....	.....	.....	.....	.....
Florida Territory	5,000	8	.....	800	.....	.....	.....	.....	.....	.....	.....
Wisconsin Territory	716	6	.....	.....	.....	.....	.....	.....	.....	.....	.....
Iowa Territory	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
District of Columbia	60,300	42	.....	.....	.....	.....	.....	.....	.....	.....	.....
	10,980,581	13,001	1,420	20,696,999	21,342	15,765,124	1,240	2,284,631	46,350,453	72,119	51,102,359

by which it was principally produced. Assuming the total value of manufactures in 1860 to have been as already stated, the product *per capita* was in the proportion of sixty dollars and sixty-one hundredths ($60 61) for every man, woman, and child in the Union. If to this amount were added the very large aggregate of mechanical productions below the annual value of five hundred dollars — of which no official cognizance is taken — the result would be one of startling magnitude.

The production of the immense aggregate above stated gave employment to about 1,100,000 men and 285,000 women, or one million and three hundred and eighty-five thousand persons. Each of these, on an average, maintained two and a half other individuals, making the whole number of persons supported by manufactures four millions eight hundred and forty-seven thousand and five hundred, (4,847,500,) or nearly one-sixth of the whole population. This was exclusive of the number engaged in the production of many of the raw materials, and of food for the manufacturers; in the distribution of their products, such as merchants, clerks, draymen, mariners, the employes of railroads, expresses, and steamboats; of capitalists, various artistic and professional classes, as well as carpenters, bricklayers, painters, and the members of other mechanical trades not classed as manufacturers. It is safe to assume, then, that one-third of the whole population is supported, directly and indirectly, by manufacturing industry. . . .

It is a gratifying fact, shown by the official statistics, that while our older communities have greatly extended their manufactures, the younger and more purely agricultural States, and even the newest Territories, have also made rapid progress. Nor has this department of American industry been cultivated at the expense of any other. There is much reason to believe that it affords the safest guarantee of the permanency and success of every other branch. Evidence bearing upon this point is found in the manufacture of agricultural machines and implements, which is one of the branches that shows the largest increase in the period under review. There is little doubt that the province of manufactures and invention in this case has been rather to create than to follow the demand. The promptness of Americans to adopt labor-saving appliances, and the vast areas devoted to grain and other staples in the United States, have developed the mechanics of agriculture to an extent and perfection elsewhere unequalled. The adoption of machinery to the extent now common in farm and plantation labor furnishes the best

assurance that the development of agriculture or manufactures to their utmost, can never again justify the old charge of antagonism between them in regard to labor, or injuriously affect either by materially modifying its cost or supply.

II. Progress of Cotton Manufactures, 1806–1860

A. *Cotton Manufactures in Massachusetts, 1806* [1]

Already by 1816 the cotton manufactures of the country were important. In that year Congress imposed a tariff on imported cotton goods, which had the effect of stimulating the industry and finally of making it the leading manufacture in the country. This remarkable growth may be seen by comparing its value of output and capital employed at different times. A traveler made the following comment on the industry early in the century:

About four miles from Providence, we passed Patucket river, and entered into the state of Massachusetts. Here there are very handsome falls, and a little town called Patucket, in which there is a thriving manufactory of cotton yarn and goods. The spinning works are said to be on the most approved principle, and there are several looms going by machinery.

We were informed that the cotton trade had been introduced here by a gentleman from England, a pupil of Arkwright, who had been very successful; that other people were following his example, and that this branch was likely to increase to a great extent in this district. I doubted the power of the people here to become competitors with the manufacturers of England; but I learned that they confine themselves pretty much to coarse goods, and articles of the first necessity; and on turning the whole information, relative to the subject, in my mind, I found that they had such a number of circumstances in their favour, as were sufficient to balance, if not to overcome, the disadvantages. The principal disadvantage is the high wages which must be paid to the workmen; and it is supposed that the people have a predeliction for agriculture, which has a tendency to prevent them from settling at sedentary employments. This last circumstance is the popular opinion in Britain, and I was impressed with its reality myself; but after looking round me in this country, I rather think that it is more specious than solid; for I find there is no want of masons, carpenters, smiths, tanners, shoemakers, hatters, taylors, and other mechanics, none of which are agricultural employments. All these and other branches are organ-

[1] *Travels Through the United States of America.* By John Melish (Philadelphia and London, 1818), 73–5.

ized and practised with persevering industry, because the profits resulting from them are equal to those resulting from agriculture; and other branches will be subject to the same rule. In every community there are a great number of the members who are better adapted for labour in the house than in the field; and the force of this remark is peculiarly applicable to the cotton trade, in which a large portion of the labour is performed by machinery, and the remainder principally by women and children. But all labour is better paid for in America than in Britain. The proportion is probably two to one; and if the cotton trade will afford this advance to the labourers, it will bear a competition with similar manufacturers of Britain, and prosper — not else.

The most striking circumstance in favour of the cotton manufactures is the cheapness of the raw material, which is the produce of the United States. They manufacture here principally upland cotton, and the price, including carriage to this place, is about 20 cents per pound; being about 12 cents lower than they can possibly have it in Britain. The next circumstance is the heavy charges to which British manufactured goods are subject before they come into the American market. These may be reckoned at least equal to 45 per cent.: namely, carriage, insurance, and shipping charges, 5 per cent; American duties, 16½ per cent.; importer's profit, 10 per cent; American merchant's profit and contingencies, 14½ per cent. . . .

It is my opinion, upon the whole, that the cotton manufacture will increase in America; and that it holds out a very good inducement for men of capital to embark in it.

B. *State of Cotton Manufactures in 1816* [1]

In 1816 a house committee investigated the manufacture of cotton goods and showed the development of the industry as follows:

While commerce flourished, the trade which had been carried on with the continent of Europe, with the East Indies, and with the colonies of Spain and France, enriched our enterprising merchants, the benefits of which were sensibly felt by the agriculturists, whose wealth and industry were increased and extended. When external commerce was suspended, the capitalists throughout the Union became solicitous to give activity to their capital. A portion of it, it is believed, was directed to the improvement of agriculture, and

[1] *House Committee Report on Domestic Manufactures.* Annals of Congress, 1815–16 (Washington, 1854), 961.

not an inconsiderable portion of it, as it appears, was likewise employed in erecting establishments for manufacturing cotton wool. To make this statement as satisfactory as possible — to give it all the certainty that it is susceptible of attaining, the following facts are respectfully submitted to the consideration of the House. They show the rapid progress which has been made in a few years, and evidently the ability to carry them on with certainty of success, should a just and liberal policy regard them as objects deserving encouragement:

In the year 1800, 500 bales of cotton were manufactured in manufacturing establishments.

In the year 1805, 1000 bales of cotton were manufactured in manufacturing establishments.

In the year 1810, 10,000 bales of cotton were manufactured in manufacturing establishments.

In the year 1815, 90,000 bales of cotton were manufactured in manufacturing establishments.

This statement the Committee have no reason to doubt; nor have they any question as to the truth of the following succinct statement of the capital which is employed, of the labor which it commands, and of the products of that labor:

Capital	$40,000,000
Males employed, from the age of 17 and upwards	10,000
Women and female children	66,000
Boys under 17 years of age	24,000
Wages of one hundred thousand persons, averaging $150 each	$15,000,000
Cotton wool manufactured, ninety thousand bales, amounting to	£27,000,000
Number of yards of cotton, of various kinds	81,000,000
Cost, per yard, averaging 30 cents	$24,000,000

C. *Historical Sketch of Cotton Manufactures before 1831* [1]

The state of the cotton manufacturing industry in this country in 1831 was not only promising but flourishing. More than a million spindles were in operation, and each year several hundred million yards of cloth were turned out from more than 500 mills. The development of the industry up to this point is given by Mr. Kettell as follows:

The old mill of Samuel Slater, Esq., the first building erected in America for the manufacture of cotton yarns, is a venerable wood-built structure, two stories in height, bearing numerous evidences of its antiquity, having been erected in 1793. Two spinning frames, the first in the mill, are still there, and are decided curiosities in their way. It is almost incredible to believe that this old building, time-

[1] *Eighty Years' Progress.* By Thomas P. Kettell (Hartford, 1869), 280–4.

worn and weather-browned, was the first to spread its sheltering roof over the young pupil of Arkwright, and that those dwarf frames, rusty and mildewed with inactivity, are the pioneer machines of that immense branch of our national industry — the manufacture of cotton goods. It may be remarked that down to 1828 the exportation of machines of all kinds, and also wool, was strictly prohibited in England, for fear other nations should benefit by English mechanical genius, of which they supposed they had a monopoly; when, however, they found that the balance of genius was on this side of the pond, they liberally removed the prohibition. Mr. Slater, the father of American cotton manufacture, was so closely watched at the English custom-house, that he could not smuggle over a drawing or pattern. He had, however, acquired a full knowledge of the Arkwright principle of spinning, and from recollection, and with his own hands, made three cards and twenty-two spindles, and put them in motion in the building of a clothier, by the water-wheel of an old fulling-mill. Sixty-seven years have since elapsed, and the business has in that period increased beyond all precedent in the history of manufactures. . . .

By the returns of the marshals of the census of 1810, the number of cotton factories was 168, with 90,000 spindles; but from most of the states no returns were made of the quantity of cotton used and the yarns spun. Massachusetts had 54, most of them, no doubt, small, having in the whole only 19,448 spindles, consuming but 838,348 pounds of cotton, and their produce valued at $931,916. Rhode Island had 26 factories, with 21,030 spindles, and Connecticut 14, with 11,883 spindles. These were for the supply of yarn to be used in hand looms exclusively.

In this position of affairs the war took place; but just on its eve Mr. Francis C. Lowell, of Boston, returned from Europe, where he had inspected the great improvements in machines for cotton manufacturing, and had formed the project of establishing the manufacture in this country. He associated with himself in the enterprise his brother-in-law, Patrick S. Jackson, and they set about it. The country was then at war with England, and there was no possibility of getting either models or machines thence, nor even drawings. The memory of Mr. Lowell was all that was to be depended upon for the structure of the machinery, the materials used in the construction, even the tools of the machine shop. The first object to be accomplished was to procure a power loom. To obtain one from England was, of course, impracticable; and although there were

many patents for such machines in our Patent Office, not one had yet exhibited sufficient merit to be adopted into use. Under these circumstances but one resource remained — to invent one themselves — and this these earnest men at once set about.

The establishment of the Lowell mills took place at a time when the occurrence of war had diverted the capital of New England from commerce, and it eagerly sought new models of investment. These were presented in the promising prospects of the newly invented machine manufactures. The cotton growth of the south had become large before the war, and that event caused an immense accumulation of stock that sunk the price to the lowest point, and by so doing, offered an abundance of raw material at rates merely nominal compared with what the English manufacturers had been paying. This gave a great advantage to the new enterprise, and Congress aided it by the establishment of protective duties. The *minimum* cotton duty was invented for the purpose. The rate was nominally *ad valorem*, but the price was fixed at a *minimum*, on which the duty was cast — hence the duty was in effect specific. Thus, the abundant raw material, the low price of cotton, and the protection of the government, all combined to give breadth to the newly awakened manufacturing fever. The capital that crowded into it, soon, as a matter of course, overdid the business, and distress followed, which was sought to be relieved by a still higher tariff in 1824. That seemed, however, to add but fuel to the flame; and in 1828, still higher rates were demanded. We may compare these tariffs: cotton goods not dyed were to be valued at twenty-five cents per square yard, and pay twenty-five per cent. duty, or six and a quarter cents per yard; goods printed or dyed were to pay nine cents per square yard; fustians, moleskins, etc., were to pay twenty-five cents per square yard; woollens were charged twenty-five per cent. in 1816, thirty-three and a half per cent. in 1824, and forty-five per cent. in 1828. Under all these circumstances, the manufacture could not fail to grow rapidly, and of course to bring on distress as the result. In 1831, the tariff excitement had reached such a pitch that the most disastrous political results were anticipated. It was then that the committee of the convention collected information of the existing manufactures. They reported the table which we annex. The returns are for the eleven states where manufactures were well developed [modified statistics of seven of the eleven states are given below]; some twenty to thirty other mills were also reported, but so imperfectly that the returns were rejected. The table is very valuable — as follows:—

STATISTICS ON THE SEVEN LEADING STATES IN COTTON-CLOTH PRODUCTION

	New Hampshire	Massachusetts	Connecticut	Rhode Island	New York	New Jersey	Pennsylvania
Capital	$5,300,000	12,891,000	2,825,000	6,262,340	3,671,500	2,027,644	3,758,500
Number of mills	40	250	94	116	112	51	67
Number of spindles	113,776	339,777	115,528	235,753	157,316	62,979	120,810
Yards of cloth	29,060,500	79,231,000	20,055,500	37,121,681	21,010,920	5,133,776[1]	21,332,467
Pounds of cotton used	7,845,000	24,871,981	6,777,209	10,414,578	7,961,670	5,832,204	7,111,174
Number of males employed	875	2,665	1,399	1,731	1,374	2,151	6,545
Weekly wage of males	$6.25	$7.00	$4.50	$5.25	$6.00	$6.00	$6.00
Number of females employed	4,090	10,678	2,477	3,297	3,652	3,070	8,351
Weekly wage of females	$2.60	$2.25	$2.20	$2.20	$1.90	$1.90	$2.00
Number of children under 12 years of age employed	60	.....	439	3,472	484	217	.....
Weekly wage of children	$2.00	.....	$1.50	$1.50	$1.40	$1.40	.....

[1] This number evidently should read 15,133,776.

Such had been the immense growth of the manufacture in ten years from the time the Lowell mills were started, when but little machine cloth was made; but in 1831, there was made, it appears, 230,461,990 yards, or nearly twenty yards per head of all the people. It is obvious that this large and sudden production of cloth could have found vent only by supplanting the work of families and hand looms, and of course by pressing hard upon the spinners of yarn. . . .

D. *A View of Cotton Manufactures in 1860*[1]

The twenty years preceding 1860 saw a rapid development of the cotton goods industry. The number of spindles increased to more than 5,000,000, while the number of pounds of cotton consumed exceeded 350,000,000.

Among the great branches of pure manufacture in the United States, that of *cotton goods* holds the first rank in respect to the value of the product and the amount of capital employed. Aided by the possession of the raw material as a product of our own soil, and by the enterprise and ingenuity of our people, this valuable industry has grown with a rapidity almost unrivalled.

The total value of cotton goods manufactured in New England was $80,301,535, and in the middle States $26,272,111 — an increase of 83.4 per cent. in the former, and 77.7 in the latter. The remaining States produced to the value of $8,564,280, making the whole production during that year $115,137,926, against $65,501,687, the value of this branch in 1850, or an increase in the general business of nearly 76 per centum in ten years. In the States of Maine and New Jersey the manufacture increased in the same time 152 per cent.; in Pennsylvania, over 102 per cent.; in New Hampshire and Connecticut, over 87 per cent.; in Massachusetts nearly 69 per cent., and in Rhode Island 88.7 per cent. The total production in this branch was at the rate *per capita* of $3 69 for every individual in the Union, equivalent to 46⅛ yards of cloth for each, at the medium price of 8 cents per yard. The average product per head in 1850 was 32¼ yards. The increase alone has, therefore, been at the rate of 11 yards for each person, or nearly equal to the average annual consumption *per capita* in 1830, when it was estimated to amount to twelve yards. The number of hands employed in the manufacture in 1860 was 45,315 males, and 73,605 females, an increase in the male operatives of 10,020, and in the female of 10,944 since 1850. The average product of the labor of each operative was $969. The number of spindles was returned

[1] *Preliminary Report on the Eighth Census, 1860.* (Washington, 1862), 65–7.

at 5,035,798, being an increase of 1,402,105, or 38.5 per cent. over the aggregate in 1850, which was estimated at 3,633,693. The New England States possess 3,959,297, or 78.6 per cent. of the whole, while Massachusetts alone employs 1,739,700, or 29.3 per cent. of the number returned in the Union. The increase of spindles in the last decade was, in New England, 1,208,219, or 30 per cent. In the State of Maine, 186,100, or 163.3 per cent.; in the State of New Hampshire, 229,484, or 52.1 per cent.; in the State of Massachusetts, 451,609, or 35 per cent.; in the State of Rhode Island, 141,862, or 22.7 per cent.; in the State of Connecticut, 211,188, or 83.1 per cent.; while in Vermont it exhibited a decrease.

The product per spindle varies in the different States, partly accounted for by the fact that many manufacturers purchase yarns which have been spun in other States.

The product of cotton goods per spindle is as follows: In Maine, $22 12; Massachusetts, $21 12; New Hampshire, $24 87; Vermont, $18 13; Rhode Island, $16; Connecticut, $16 46. The average in the New England States is $20 30; in the middle States, $30 48, and in the whole Union, $22 86.

The quantity of cotton used in the fabrication of the above goods was 364,036,123 pounds, or 910,090 bales of 400 pounds each. Of this amount the New England States consumed 611,738 bales, and Massachusetts alone 316,665. The consumption per spindle in that year in the various States and sections was as follows:

	No. of Spindles	Pounds of Cotton	Pounds per spindle
Maine	300,000	23,438,723	78
New Hampshire	669,885	39,212,644	58.5
Vermont	19,712	1,057,250	53
Massachusetts	1,739,700	126,666,089	72.8
Rhode Island	766,000	38,521,608	50.2
Connecticut	464,000	15,799,140	34
In New England	3,959,297	237,844,854	61.8
In the Middle States	861,661	76,055,666	88.26
In the United States	5,035,798	364,036,123	72.2

When we consider the large number of hands, and especially of women and children, who find employment in this business, the quantity of raw material, of machinery and of fuel, exclusively of

American production, employed in this branch, and the amount of comfortable clothing and household stuffs supplied at cheap rates, or the amount it contributes to the internal and foreign commerce of the Union — its progressive increase is a subject of the highest satisfaction, and its growth both here and abroad is one of the marvels of the nineteenth century.

III. The Woolen Industry, 1811–1860

A. *Woolen Cloth for Army Uniforms, 1811* [1]

The woolen industry had been important from an early day, for the "homespun" worn by the colonists was made of wool. Although its manufacture fell behind that of cotton goods with the introduction of machinery, it continued to be increasingly important down to the breaking out of the Civil War. Even before the Second War with Great Britain the American manufactures were able to compete with the English product.

In the woollen branch offers [of cloth for army uniforms] were abundant, and the finer the goods or the materials proposed the more ready the disposition, abundant the quantity in proportion to the demand and moderate the prices. The best cloths, suitable for the commissioned officers, were offered upon terms the least advanced above the European prices, owing to the spreading of the merino sheep. The cloths for the non-commissioned officers and privates, were offered upon terms advanced upon the next degree of moderation above the European prices, because the great body of our native or old stock of sheep produce wool, which after picking out a little coarse and a good deal of fine, will do well for cloths suitable for these two purposes. . . .

B. *Early Agitation for Sheep Raising, 1811* [2]

Friends of American woolen manufactures early called attention to the importance of increasing the flocks and of improving the breed of sheep in the United States. To this end they pointed out the superior advantages of the country in this respect over Great Britain. The following is a typical appeal:

It will be found in Mr. Arthur Young's "*Report* (p. 367) *on Lincolnshire*" in England, that the whole land in that county is 1,848,000 acres; having on them 2,400,000 sheep of two *heavy fleeced* breeds, producing 21,610,000 pounds of wool, selling at one-sixth of a dollar (or 15 pence sterling) per pound. The whole value of un-

[1] *Niles' Register* (Baltimore, 1811), I, 45.
[2] *Niles' Register* (Baltimore, 1811), I, 100.

manufactured wool is £810,900 sterling; equal to 3,600,000 dollars.— This, at our prices for wool, would be equal in value to all the American cotton exported from the United States in a year, being 7 or 8 millions of dollars. The weight of this wool is greater than the weight of all the sheep wool yet made in the United States in any year.

When it is considered, that the quantity of land in Lincolnshire (G. B.) is not more than one-fifteenth of the land in Pennsylvania, or in New York, a tenth of South Carolina, or one-twelfth of North Carolina, there can be no doubt of the *immense* capacity of the United States to produce wool. The county of Lincoln (G. B.) is in a great part fenny or marshy: in part it is heath: in parts dry and rich. Some of the fenny districts produce fleeces of fourteen pounds. It is probable that some of our richest drained swamps would be excellent for such sheep.

Mr. Young states, that the average of the *Lincolnshire* sheep, of the two *different* breeds, is nine pounds of wool to the fleece: and those farmers who confine themselves to the Lincolnshire breed get ten pound. Some authorities say eleven pounds, are the true average weight of the fleeces of the true *Lincolnshire breed*. Let us increase our care of sheep, and omit to kill any lambs or sheep under three years old, and we shall have more wool in the next year or two for our army, navy, militia, and camp followers and all attendants and privateers, than will be requisite for any war with any power in Europe.

C. *State of the Woolen Industry in 1816*[1]

In 1816 the house committee on commerce and manufactures expressed the belief that a memorial from which the following extract is taken was substantially correct.

At this time there are in the State of Connecticut alone twenty-five establishments for the manufacture of woollen cloths, employing twelve hundred persons, and as many more indirectly who do not immediately appertain to the establishment. The capital already invested therein amounts to four hundred and fifty thousand dollars; and they are capable of making, and probably do manufacture annually, equal in amount to three hundred and seventy-five thousand yards of narrow, or one hundred and twenty-five thousand yards of broadcloths. Besides this quantity made at the establishments, it is calculated there are five hundred thousand yards made annually in families and dressed in the country clothiers' shops; part of which

[1] *House Committee Report on Domestic Manufactures.* Annals of Congress, 1815–16 (Washington, 1854), 1701–3.

is regularly sold to the country stores; . . . The value of all the woollen cloths thus manufactured, at the lowest estimate, is about $1,500,000, making a home market for a staple of nine hundred thousand pounds of wool, or the produce of four hundred thousand sheep. . . .

A great proportion of the woollen manufacture is done by the assistance of labor-saving machinery, which is almost exclusively superintended by women and children, and the infirm, who would otherwise be wholly destitute of employment; whereas they are now able to maintain themselves. The manual labor employed is of that class who, from their previous habits and occupations in life, are wholly unfitted for agricultural pursuits; and who, if not thus employed would, in most instances, be a burden on society. . . .

SUMMARY

Permanent capital in buildings and machinery	$12,000,000.
Annual value of raw material, manufactured	7,000,000.
Value of cloths annually manufactured	19,000,000.
Increase of value by manufacturing	12,000,000.
Number of persons employed	
Directly	50,000
Incidentally	50,000
	100,000

D. *The Woolen Industry in 1860* [1]

In 1860 the woolen establishments in the United States numbered almost two thousand, represented an investment of more than $35,000,000, and gave employment to 50,000 hands.

The returns of *Woolen Manufacturers* show an increase of over fifty-one per cent. in ten years. The value of woollen and mixed goods made in 1850 was $45,281,764. In 1860 it amounted to $68,865,963. The establishments numbered 1,909, of which 453 were in New England, 748 in the middle, 479 in the western, 2 in the Pacific, and 227 in the southern States. The aggregate capital invested in the business was $35,520,527, and it employed 28,780 male and 20,120 female hands, 639,700 spindles, and 16,075 looms, which worked up more than eighty million pounds of wool, the value of which, with other raw materials, was $40,360,300. The foregoing figures include satinets, Kentucky jeans, and other fabrics of which the warp is cotton, though usually classed with woollens. In the

[1] *Preliminary Report on the Eighth Census, 1860.* (Washington, 1862), 67.

manufacture of these mixed goods the amount of cotton consumed is 16,008,625 pounds, which, with 364,036,123 pounds used in making cotton goods, as previously stated, amounts to 380,044,748 pounds, or 950,112 bales, exclusive of a considerable quantity used, annually, in household manufactures, and for various other purposes.

The largest amount of woollens was made in New England, where the capital was nearly twenty millions of dollars, and the value of the product $38,509,080, but little less than the total value in 1850. More than half the capital, and nearly one-half of the product of New England belonged to Massachusetts, which had 131 factories of large size. Rhode Island ranked next, and had increased its manufacture 163 per cent. in ten years, that of Massachusetts being 48 per cent. The value of woollens produced in the middle States was $24,100,488, in the western $3,718,092, and in the Pacific and southern $2,538,303. The sectional increase was, in New England 52.1, in the middle States 54, and in the south 107 — the last showing the greatest relative increase. Pennsylvania, next to Massachusetts, was the largest producer, having 447 factories, which made $12,744,373 worth of woollen and mixed fabrics, an increase of 120 per cent. A value of $8,919,019 was the product of 222 establishments in the city of Philadelphia.

The State of New York holds the third rank in relation to this industry, its manufactures amounting to more than nine millions of dollars. The woollen manufactures of Maryland exhibit an increase of 86 per cent. In Ohio, which produced in 1850 a greater value of woollens than all the other western States, there was a decrease on the product of 1850, owing, probably, to the shipments of wool to Europe, which, in 1857, was found to be the most profitable disposition of the rapidly increasing wool crops of that State. In Kentucky, now the largest manufacturer of wool in the west, the product was $1,128,882, and the increase in ten years 40.4 per cent.; while in Indiana, which ranks next, it was 31 per cent., and in Missouri 18.8, on the product of 1850. . . .

The quantity of wool returned for the whole Union in 1850 was upwards of fifty-two and a half millions of pounds. Sheep raising has been greatly extended and improved since that date in Ohio, Texas, California, and other States, and the clip in 1860 amounted to 60,511,343 pounds, an increase of 15.2 per cent. in ten years. The yield still falls far short of the consumption, and large quantities continue to be imported, notwithstanding the amount of territory adapted to sheep husbandry.

IV. Development of the Iron and Steel Industry

View in 1860[1]

A third important manufacturing industry was that of iron and steel products. The United States was dependent on England during the colonial period and for years afterward for these products, but by 1860 this country was producing a great part of the iron and steel consumed here.

The total value of *Agricultural Implements* made in 1860 was $17,802,514, being an increase of 160.1 per cent. upon the total value of the same branch in 1850, when it amounted to the sum of $6,842,611. This manufacture amounted in New England to over two and three-quarter millions of dollars — an increase of 65.8 per cent. In the middle States the value was nearly five and a half millions, having increased at the rate of 122.2 per centum. In the western States, where the increase was most extraordinary, the value of implements produced was augmented from $1,923,927 to $7,955,545. The increment alone in those States was, therefore, only a fraction less than the product of the whole northern section of the Union in 1850, and was greater by 313 per cent. than their own manufacture in that year. In each of the States of Ohio and Illinois, which are the largest manufacturers in the west, the value of the product exceeded two and a half millions dollars, being an increase in the former of 382, and in the latter of 235 per cent. in ten years. Michigan, Indiana, and Wisconsin increased their production of agricultural implements 1,250,386 and 201 per cent., respectively. While in some of the southern States there has been a decrease, in Virginia, Alabama, and Louisiana the increase in this branch has been large, and in Texas, which reported none in 1850, agricultural implements of the value of $140,000 were manufactured in 1860. The whole value produced in the southern States in the latter year (including cotton gins) was $1,582,483, exhibiting an increase of over 101 per cent. in the last decade.

The quantity of *Pig Iron* returned by the census of 1860 was 884,474 tons, valued at $19,487,790, an increase of 44.4 per cent. upon the value returned in 1850. Bar and other *Rolled Iron* amounted to 406,298 tons, of the value of $22,248,796, an increase of 39.5 per cent. over the united products of the rolling mills and forges, which in 1850 were of the value of $15,938,786. This large production of over one and a quarter million of tons of iron, equivalent to 92 pounds for each inhabitant, speaks volumes for the progress of the nation in

[1] *Preliminary Report on the Eighth Census, 1860.* (Washington, 1862), 61–3.

all its industrial and material interests. The manufacture holds relations of the most beneficial character to a wide circle of important interests intimately affecting the entire population; the proprietors and miners of ore, coal, and limestone lands; the owners and improvers of woodlands, of railroads, canals, steamboats, ships, and of every other form of transportation; the producers of food, clothing, and other supplies, in addition to thousands of workmen, merchants, and capitalists and their families, who have directly participated in the benefits resulting from this great industry. It has supplied the material for an immense number of founderies, and for thousands of blacksmiths, machinists, millwrights, and manufacturers of nails, hardware, cutlery, edged tools, and other workers in metals, whose products are of immense aggregate value and of the first necessity. The production of so large a quantity of iron, and particularly of bar iron, and the demand for additional quantities from abroad, tell of the progress of the country in civil and naval architecture and all the engineering arts; of the construction of railroads and telegraphs, which have spread like a net over the whole country; of steam-engines and locomotives; of spinning, weaving, wood, and metal working, milling, mining, and other machinery; and of all the multiform instruments of science, agriculture, and the arts, both of peace and of war; of the manufacture of every conceivable article of convenience or luxury of the household, the field, or the factory. The aggregate statistics of iron exhibit the extent to which the general condition of the people has been improved by this great agent of civilization during the ten years embraced in this retrospect.

The materials for the manufacture of iron — ore, coal and other fuel, water power, etc.— are so diffused, abundant, and cheap that entire independence of foreign supplies appears to be alike desirable and attainable at no distant period.

Probably no class of statistics possesses more general interest, as illustrating the recent progress of the country in all the operative branches, and in mechanical engineering, than those relating to *Machinery*. Nearly every section of the country, particularly the Atlantic slope, possesses a great affluence of water power, which has been extensively appropriated for various manufacturing purposes. The construction of hydraulic machinery, of stationary and locomotive steam-engines, and all the machinery used in mines, mills, furnaces, forges, and factories; in the building of roads, bridges, canals, railways, etc.; and for all other purposes of the engineer and manufacturer, has become a pursuit of great magnitude. The annual product of

the general machinists' and millwrights' establishments, as returned in the census of 1850, was valued at $27,998,344. The value of the same branch, exclusive of sewing-machines, amounted in 1860 to $47,118,550, an increase of over eighteen millions in ten years. The middle States were the largest producers, having made over 48 per cent. of the whole, but the southern and western States exhibit the largest relative increase. The ratio of increase in the several sections was as follows: New England, 16.4 per cent.; middle States, 55.2; southern, 387; and western, 127 per cent. The Pacific States produced machinery of the value of $1,686,510, of which California made $1,600,510. In Rhode Island the business was slightly diminished, but in Connecticut it had increased 165 per centum. The great facilities possessed by New York and Pennsylvania in iron, coal, and transportation, made them the largest manufacturers of machinery, which in the former was made to the value of $10,484,863, and in the latter $7,243,453 — an increase of 24.4 and 75 per cent., respectively. New Jersey raised her product to $3,215,673, an increase of 261 per cent., while Delaware and Maryland and the District of Columbia exhibited an increase of 82, 41, and 667 per cent., respectively. In all the southern States the value of the manufacture, though small, was largely increased; the ratio in Virginia, the largest producer, being 236 per cent., while in Mississippi, Alabama, and South Carolina, the next in amount of production, it was 1,626,270, and 525 per centum, respectively. This was exclusive of cotton-gins, which were included with agricultural machinery. Ohio was the largest producer in the west, and the fourth in the Union, having made to the value of $4,855,005, an increase of 125 per cent. on the product of 1850. Kentucky ranked next among the western States, having produced over one million dollars' worth, and increased her product 213 per cent. The ratio of increase in the other western States was, in Indiana, 98; in Illinois, 24; Wisconsin, 208; Missouri, 214; and Iowa, 2,910 per cent., respectively; but in Michigan there was a small decrease in the amount manufactured.

Besides a large amount of machinery and other castings included in the returns of machine shops, the value of the production of *Iron Foundries*, returned by the census of 1860, reached the sum of $27,970,193, an increase of 42 per cent. on the value of that branch in 1850, which was $20,111,517. New York, whose extensive stove founderies swell the amount of production in that State, made to the value of $8,216,124, and Pennsylvania, $4,977,793, an increase of 39 and 60.9 per cent., respectively.

With the subject of iron and its various manufactures that of *Fossil Fuel* naturally associates itself. The unequalled wealth and rapid development of the coal fields of the United States as a dynamic element in our industrial progress affords one of the most striking evidences of our recent advance. The product of all the coal mines of the United States, in 1850, was valued at $7,173,750. The annual value of the anthracite and bituminous coal, according to the Eighth Census, was *over nineteen millions* of dollars. The increase was over twelve millions of dollars, and was at the rate of 169.9 per cent. on the product of 1850. It was chiefly produced in Pennsylvania, Ohio, and Virginia. The coal mined in Pennsylvania, in 1850, was valued at $5,268,351. In the year ending June 1, 1860, the State produced 9,397,332 tons of anthracite, worth $11,869,574, and of bituminous coal, 66,994,295 bushels, valued at $2,833,859, making a total value of $14,703,433, or an excess of $7,529,683 over the total product of the Union in 1850. Of bituminous coal, Ohio raised 28,339,900 bushels, the value of which was $1,539,713; and Virginia, 9,542,627 bushels, worth $690,188. The increase in Ohio was $819,587, and in Virginia, $222,780, in the value of mineral fuel, being at the rate of 113 per cent. in the former, and 47.6 per cent. in the latter. The increase in Pennsylvania was 179 per centum on the yield of 1850.

V. The Leather Industry

Development during the Decade 1850–1860[1]

The tanning of leather and its manufacture into boots, shoes, and harness, formed another important industry. On the one hand the industry touched the agricultural interests of the country and on the other the manufacturing and shipping interests.

The production of *Leather* is also a leading industry of much importance to the agriculturist and stock raiser, as well as to the commercial interest, inasmuch as it consumes all the material supplied by the former, and feeds an active branch of our foreign import trade. The tanning and currying establishments of the United States produced in 1850 leather, exclusive of Morocco and patent leather, to the value of $37,702,333. The product of the same branch in 1860 reached $63,090,751, an increase of nearly 67 per centum. In the New England States it was $16,333,871, in the Middle States, $36,344,548, and in the Western States, $5,986,457; being an increase 66.6 per cent., 90.7 and 13.3 in those sections, respectively.

[1] *Preliminary Report on the Eighth Census, 1860.* (Washington, 1862), 68–9.

The Pacific States and Territories, (including Utah,) which returned no leather in 1850, produced in 1860 to the value of $351,469. The largest producers of leather are New York, $20,758,017; Pennsylvania, $12,491,631; and Massachusetts, $10,354,056; an increase in those States of 111.7, 98.4, and 82.3 per cent., respectively. Including Morocco and patent leather the aggregate value produced in the Union in 1860 exceeded sixty-seven millions of dollars.

If we add to the sum total of this manufacture the aggregate value of all the allied branches into which it enters as a raw material, or take an account of the capital, the number of hands, and the cost of labor and material employed in the creation and distribution of its ultimate products, it is doubtful if any other department of industry is entitled to precedence over that of leather.

The manufacture of *Boots* and *Shoes* employs a larger number of operatives than any other single branch of American industry. The census of 1850 showed that there were 11,305 establishments, with a capital of nearly thirteen millions of dollars, engaged in making boots and shoes to the value of $53,967,408, and employing 72,305 male and 32,948 female hands. The returns of 1860 show that 2,554 establishments in the New England States employed a capital only $2,516 less than that of the whole Union at the former date; and with 56,039 male and 24,978 female employés produced boots and shoes of the value of $54,767,077 or eight hundred thousand dollars more than the entire value of the business in 1850, and 82.8 per centum in excess of their own production in that year. Massachusetts increased 92.6 per cent., having made boots and shoes of the value of $46,440,209, equal to 86.6 per cent. of the general business in 1850. The State of New York returned 2,276 factories, with an aggregate production of $10,878,797; and New England, New York, Pennsylvania, and New Jersey together produced $75,674,946 worth of these articles, being 40.4 per cent. more than the product of all the States in 1850, and 67.9 per cent. more than their own manufacture in that year. The three counties of Essex, Worcester, and Plymouth, in Massachusetts, produced boots and shoes to the value severally of about $14\frac{1}{2}$, $9\frac{1}{2}$, and $9\frac{1}{4}$ millions of dollars. The largest production of any one town was that of Philadelphia, in which it amounted to $5,329,887; the next that of Lynn, Massachusetts, was $4,867,399; the third, Haverhill, $4,130,500; the fourth, New York city, $3,869,068. The largest production of a single establishment was of one in North Brookfield, Massachusetts, and amounted to over $750,000. This establishment was the largest of five the same proprietors had

in operation that year, the total production whereof was over one million pairs of boots and shoes, valued at more than thirteen hundred thousand dollars! Machinery propelled by steam power is now used in many large manufactories with highly satisfactory results.

VI. The Boston Shoe Trade

Extent and Value of Shipments in 1859[1]

The center of the shoe trade of the United States was Boston. From the many factories located in the neighborhood of that city, the shoes were shipped to Boston for distribution. The extent of the trade was as follows:

The annual shipments of boots and shoes from Boston have reached the large figure of 723,069 cases. The shipments to domestic markets during the year 1859, amounted to 714,981 cases; the foreign shipments have been 5,078 cases, presenting the above aggregate. We are unable to make an exact comparison with the business of 1858, as our weekly railway tables were not commenced until July of that year, but we can make a near approximation. The clearances at the custom-house in 1858, were 229,780 cases; the shipments by rail for the last half of the year were 239,439 cases, and it is probable that those of the earlier portion of the year, which usually are somewhat less, were, in consequence of the previous panic, not more than three-fourths of that amount. This would give a total of nearly 650,000 cases for 1858. There must have been an increase of at least 75,000 cases the past year.

These figures do not embrace the entire business. The shipments to the New England towns, which are kept distinct from the Southern and Western freights by the different railway companies, are so frequent and numerous, and at the same time the gross amount is comparatively so small, and the information of so little value, that we do not undertake the almost impossible task of including them in the weekly returns; in fact, by keeping a clerk constantly at the office of each road, we could scarcely take them from the freight bills during the busy season without interfering with the business of the road. Making due allowance for this New England trade, for the impossibility of deciphering obscure figures on the freight bills, for the errors of railroad clerks, and for the clearances by sea to Southern ports, which are sometimes entered as merchandise, we shall find that the sales of Boston dealers the past year have considerably

[1] *Hunt's Merchants' Magazine.* (New York, 1860), XLII, 610–3.

exceeded three quarters of a million cases of boots and shoes. An average of fifty pairs to a case would give us over 37,500,000 pairs, which, at the estimate of $1 15 per pair, would present an aggregate value of more than $43,000,000.

The annual table gave the separate shipments for each quarter to each of 439 towns and villages at the South and West, and the aggregate quarterly shipments to a still larger number of places not specified, the last being such as received less than twenty cases, with a few that presented some difficulty in ascertaining with certainty the name of the town or State, but altogether amounting to only 19,271 cases. One-fourth of the whole number were sent to New York. Seven of the markets drew two-thirds of the entire shipments, viz., New York, 182,207 cases; San Francisco, 63,887; Baltimore, 62,464; Philadelphia, 59,119; St. Louis, 55,774; Cincinnati, 44,882; and New Orleans, 37,686 cases. The shipments to Louisville were 21,119; to Chicago, 19,168; to Charleston, 17,177; and to Nashville, 13,781 cases. Of the others, there were sent to Richmond, Detroit, Buffalo, Pittsburg, Memphis, and Milwaukee, from 3,000 to 5,000 cases each; to Indianapolis, Savannah, New Albany, St. Joseph, Portsmouth, O., Lexington, Alton, Keokuk, Troy, and Rochester, from 2,000 to 3,000 each; and to Albany, Galena, Evansville, Syracuse, Dayton, Lafayette, Ind., Columbus, O., Quincy, Ill., Burlington, Iowa, Dubuque, Norfolk, and Portsmouth, Va., Galesburg, Ill., and Paducah, Ky., from 1,000 to 2,000 cases each. Nineteen other places received from 500 to 1,000 each, and one hundred and three places from 100 to 500 cases. The remainder, amounting to 275 places, received from 20 to 100 cases each. Not counting those sent to the States of New York, Pennsylvania, Maryland, and California, and classing Missouri and Kentucky with the South, there were shipped to the Southern States, 185,147 cases; and to the West, 139,762 cases. . . .

VII. Miscellaneous Manufactures

Extent, Variety, and Value in 1860[1]

Several manufacturing industries other than those already noticed had become important by 1860.

The increase of *Printing Presses* in the book and newspaper manufacture has been great beyond all precedent, and has exerted the most

[1] *Preliminary Report on the Eighth Census, 1860.* (Washington, 1862), 63–5, 67–9.

beneficent influence by cheapening and multiplying the vehicles of instruction. Its effects are everywhere apparent. Never did an army before possess so much of cultivated intellect [written during the first year of the Civil War], or demand such contributions for its mental food as that now marshalled in its country's defence. Many of these reading soldiers ripened their intellectual tastes during the last ten years. In fact, many divisions of our army carry the printing press and type, and the soldiers issue publications and print the forms for official papers. The press is, indeed, the great prompter of enterprise. It constantly travels with the emigrant to diffuse light and intelligence from our remotest frontiers, where it speedily calls into existence the paper-mill and all the accessories which it supports in older communities.

In New England, the Middle, and Western States the value of book, job, and newspaper printing is returned as $39,428,043, of which eleven millions' worth consisted of books, the value of the latter being nearly equal to the whole product of the same branch in 1850, which was returned at $11,586,549. The manufacture of *Paper*, especially of printing paper, has increased in an equal ratio, the State of Massachusetts alone producing paper of the value of $5,968,469, being over 58 per cent. of the product of the Union in 1850. New York returned paper of the value of $3,516,276; Connecticut, $2,528,758; and Pennsylvania, $1,785,900.

The *Sewing Machine* has also been improved and introduced, in the last ten years, to an extent which has made it altogether a revolutionary instrument. It has opened avenues to profitable and healthful industry for thousands of industrious females to whom the labors of the needle had become wholly unremunerative and injurious in their effects. Like all automatic powers, it has enhanced the comforts of every class by cheapening the process of manufacture of numerous articles of prime necessity, without permanently subtracting from the average means of support of any portion of the community. It has added a positive increment to the permanent wealth of the country by creating larger and more varied applications of capital and skill in the several branches to which it is auxiliary. The manufacture of the machines has itself become one of considerable magnitude, and has received a remarkable impulse since 1850. The returns show an aggregate of 116,330 machines made in nine States in 1860, the value of which was $5,605,345. A single establishment in Connecticut manufactured machines to the value of over $2,700,000, or nearly one-half of the whole production in that year. During the year 1861 sewing

machines to the value of over $61,000 were exported to foreign countries. It is already employed in a great variety of operations and upon different materials, and is rapidly becoming an indispensable and general appendage to the household.

Among the branches of industry which have been signally promoted by the introduction of the sewing-machine is the manufacture of men's and women's *Clothing* for sale, which has heretofore ranked with the cotton manufactures in the number of hands — two-thirds of them females — and the cost of labor employed. The increase of this manufacture has been general throughout the Union, and in the four cities of New York, Philadelphia, Cincinnati, and Boston, amounted in value to nearly forty and one-quarter millions of dollars, or over 83 per cent. of the product of the whole Union in 1850. The manufacture of shirts and collars, of ladies' cloaks and mantillas — a new branch which has received its principal impulse within the last ten years — and of ladies' and gentlemen's furnishing goods generally, form very large items in the general aggregate of this branch. They severally employ extensive and numerous establishments, many of them in our large cities with heavy capital. In Troy, New York, the value of shirt collars alone annually manufactured is nearly $800,000, approximating in value to the product of the numerous and extensive iron founderies which have been a source of wealth to that city.

The influence of improved machinery is also conspicuously exhibited in the manufacture of *sawed* and *planed lumber*, in which the United States stands altogether unrivalled, as well for the extent and perfection of the mechanism employed as the amount of the product. This reached, in 1850, the value of $58,521,976, and, in 1860, $95,912,286, an increase of 64 per cent. in the last decade. The western States alone, in the latter year, produced lumber to the value of $33,274,793, an increase of $18,697,543, or 128 per cent. over their manufacture in 1850. The Pacific States and Territories produced to the value of $6,171,431, and the southern $17,941,162, a respective increase of $3,841,826 and $9,094,686 in those sections, being a ratio of 162.7 and 102.3 per centum.

Several branches of manufacture have an intimate relation to agriculture and the landed interests, and by their extension powerfully promote those interests as well as that of commerce. Surpassing all others of this or any other class in the value of products and of the raw material consumed, is the manufacture of flour and meal. The product of *flour* and *grist mills* in 1850 reached a value of nearly one hundred and thirty-six millions of dollars, while in 1860 the returns

exhibit a value of $223,144,369 — an increase of $87,246,563, or 64.2 per cent. in the last ten years. The production and increase of the several sections were as follows:

	Value of flour and meal	Increase	Per cent. increase
New England States	$11,155,445	$4,834,959	76.5
Middle States	79,086,411	10,653,232	15.5
Western States	96,038,794	53,364,802	125.0
Southern States	30,767,457	14,185,640	85.5
Pacific States	6,096,262	4,207,930	222.8

The largest mill is in Oswego, New York, which in 1860 produced 300,000 barrels of flour; the next two, in Richmond, Virginia, made 190,000 and 160,000, respectively; and the fourth, in New York City, returned 146,000 barrels. The value of annual production of each ranged from one million and a half to one million dollars. . . .

The manufacture of *Linen Goods* has made but little progress in this country. A few mills, chiefly in Massachusetts, make crash and other coarse fabrics; the largest two in that State produced six million yards in 1860. Others are extensively engaged in making twines, shoe and other threads. It is to be regretted that the manufacture of flax has not attained greater magnitude in a country where the raw material is so easily and cheaply grown. Farmers throughout the west have raised the crop simply for the seed, and thrown out the fibre as valueless.

The manufacture of fabrics from *Flax Cotton* has been commenced, and success in a new branch of industry is confidently expected. The inventive genius of our countrymen has perfected machinery for the preparation of flax for spinning, which can be furnished, it is alleged, at as low a rate as the product of southern cotton fields.

The manufacture of *Sewing Silks* is extensively carried on in this country. Including tram, organzine, &c., the production exceeded five million dollars in the States of Connecticut, New Jersey, Massachusetts, Pennsylvania, and New York — their relative values being in the order mentioned. Ribbons are made to a small extent, but the chief manufactures of silk consist of ladies dress trimmings, coach lace, &c., of which the cities of Philadelphia and New York produce to the value of $1,260,725 and $796,682, respectively. . . .

India Rubber Goods were made chiefly in Connecticut, New York,

New Jersey, and Massachusetts to the value of $5,729,900, an increase of 90 per cent. in the last decade.

The value of *Cabinet Furniture* made in 1860 in the New England, Middle and Western States reached the sum of $22,701,304, an increase of 39.8 per cent. over the product of those States in 1850, and exceeding the production of the whole Union in 1850. New York returned in 1860 furniture of the value of $7,175,060, (or 40.6 per cent. of the whole amount made in 1850.) Massachusetts, $3,365,415, and Pennsylvania, $2,938,503. The growth of this branch keeps pace with the increase of population and wealth, and serves to swell the amount of our exports. It gives employment at remunerative prices to skilled labor, which it attracts from the crowded labor-markets of Europe.

Our advance in wealth and refinement is attested by the rapid increase in the manufacture of piano fortes and other *Musical Instruments*. New England, New York, and Pennsylvania produced musical instruments to the value of $5,791,807; an increase of 150 per cent. over their own production in 1850, and 124 over the whole value of that branch in the Union in the same year. New York alone made $3,392,577 worth, being $811,862 more than the whole amount returned in 1850. In this branch, our manufacturers have achieved marked success. Without claiming for them superiority over their brethren in France and Germany, it is admitted that church organs and other instruments made in this country are better suited to the climate, and in other respects fully equal to those which come from the most celebrated establishments in Europe.

The increased amount of the precious metals and the greater ability of all classes to indulge the promptings of taste or luxury, have added greatly to the manufacture of *Jewelry*, and of all kinds of gold, silver, and plated wares. In the New England and Middle States, the production of jewelry and watches reaches over eleven millions in value; of silver, silver-plated wares, &c., over six and one-half millions; making nearly eighteen millions of dollars, exclusive of gold leaf and foil, and the assaying and refining the precious metals, exceeding the product of the whole Union, in 1850, by $7,016,908 in value; an increase of over sixty-four per cent., and of seventy per cent. on the production of those States in that year. The production of cheap jewelry has been greatly augmented by recent improvements in electro-metallurgy.

The manufacture of American *Watches*, commenced within the last ten years in Boston as an experiment, has proved eminently

successful. Unable, heretofore to compete with the low-priced labor of European workmen, our ingenious countrymen have perfected machinery, by the aid of which watch movements are fabricated equal, if not superior, to the hand-made. The continued growth of this branch will diminish the importation of foreign watches, and may, at no distant period, earn for our country a reputation in this manufacture equal to that she enjoys in the kindred branch of clock-making. Gold and silver watch cases are now produced to a very large extent, chiefly in the cities of Philadelphia, New York, and Newark.

CHAPTER X

THE TARIFF, 1808–1860

I. Encouragement to Manufactures

Gallatin's Plans, 1810[1]

Following the Embargo Act in 1807 the industry of the country slowly underwent important changes. Part of the capital that had been employed in shipping and commerce was invested in manufactures, while another part found its way into western agriculture. By 1810 it had become obvious that the government ought to encourage the former industry, and in a report on manufactures in that year, Secretary Gallatin had the following to say on the subject:

The revenue of the United States, being principally derived from duties on the importation of foreign merchandise, these have also operated as a premium in favor of American manufactures, whilst, on the other hand, the continuance of peace, and the frugality of Government, have rendered unnecessary any oppressive taxes, tending materially to enhance the price of labor, or impeding any species of industry.

No cause, indeed, has, perhaps, more promoted, in every respect, the general prosperity of the United States, than the absence of those systems of internal restrictions and monopoly which continue to disfigure the state of society in other countries. No law exists here, directly or indirectly, confining man to a particular occupation or place, or excluding any citizen from any branch, he may, at any time, think proper to pursue. Industry is, in every respect, opened to all, without requiring any previous regular apprenticeship, admission, or license. Hence the progress of America has not been confined to the improvement of her agriculture, and to the rapid formation of new settlements and States in the wilderness; but her citizens have extended their commerce through every part of the globe, and carry on with complete success, even those branches for which a monopoly had heretofore been considered essentially necessary.

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[1] Gallatin's *Report on Manufactures*, 1810. American State Papers (Washington, 1834), Series Finance, II, 430.

The same principle has also accelerated the introduction and progress of manufactures, and must ultimately give in that branch, as in all others, a decided superiority to the citizens of the United States over the inhabitants of countries oppressed by taxes, restrictions and monopolies. It is believed that, even at this time, the only powerful obstacle against which American manufactures have to struggle, arises from the vastly superior capital of the first manufacturing nation of Europe, which enables her merchants to give very long credits, to sell on small profits, and to make occasional sacrifices.

The information which has been obtained is not sufficient to submit, in conformity with the resolution of the House, the plan best calculated to protect and promote American manufactures. The most obvious means are bounties, increased duties on importation, and loans by Government.

Occasional premiums might be beneficial; but a general system of bounties is more applicable to articles exported than to those manufactured for home consumption.

The present system of duties may, in some respects, be equalized and improved, so as to protect some species of manufactures without effecting the revenue. But prohibitory duties are liable to the treble objection of destroying competition, of taxing the consumer, and of diverting capital and industry into channels generally less profitable to the nation than those which would have naturally been pursued by individual interest left to itself. A moderate increase will be less dangerous, and, if adopted, should be continued during a certain period; for the repeal of a duty once laid, materially injures those who have relied on its permanency, as has been exemplified in the salt manufacture. . . .

II. Need of Protection

Recommendation of President Madison, 1815[1]

The first definite news of the treaty with Great Britain reached the United States early in 1815. The provisions of the treaty naturally affected the course the President of the United States would take toward the protection of manufactures. In his next annual message to Congress (December, 1815), President Madison recommended the imposition of a protective tariff that would protect American manufactures in general, but more particularly those which would make the United States independent of foreign powers in case of war. He said:

In adjusting the duties on imports, to the object of revenue, the influence of the tariff on manufactures will necessarily present itself

[1] *Messages and Papers of the Presidents.* Edited by James D. Richardson ([Washington], 1895–1903), I, 567.

for consideration. However wise the theory may be which leaves to the sagacity and interest of individuals the application of their industry and resources, there are in this, as in other cases, exceptions to the general rule. Besides the condition which the theory itself implies, of a reciprocal adoption by other nations, experience teaches that so many circumstances must concur in introducing and maturing manufacturing establishments, especially of the more complicated kinds, that a country may remain long without them, although sufficiently advanced, and, in some respects, even peculiarly fitted for carrying them on with success. Under circumstances giving a powerful impulse to manufacturing industry, it has made among us a progress, and exhibited an efficiency, which justifies the belief that, with a protection not more than is due to the enterprising citizens whose interests are now at stake, it will become, at an early day, not only safe against occasional competitions from abroad, but a source of domestic wealth, and even of external commerce. In selecting the branches more especially entitled to the public patronage, a preference is obviously claimed by such as will relieve the United States from a dependence on foreign supplies, ever subject to casual failures, for articles necessary for the public defence, or connected with the primary wants of individuals. It will be an additional recommendation of particular manufactures, where the materials for them are extensively drawn from our agriculture, and consequently impart and insure to that great fund of national prosperity and independence an encouragement which cannot fail to be rewarded.

III. Arguments for a Protective Tariff

Views of Congress, 1816 [1]

That part of President Madison's message relating to a protective tariff was referred to a house committee for consideration. A majority of the committee was from the manufacturing states, but several of its members were from the extreme south. This committee received petitions from manufacturers, and after considering them in relation to the demands of the public finances recommended that a protective tariff be enacted as follows:

The States that are most disposed to manufactures, as regular occupations, will draw from the agricultural States all the raw materials which they want, and not an inconsiderable portion also of the necessaries of life; while the latter will, in addition to the

[1] *House Committee Report on Domestic Manufactures.* Annals of Congress, 1815–16 (Washington, 1854), 962–4.

benefits which they at present enjoy, always command, in peace or in war, at moderate prices, every species of manufacture that their wants may require. Should they be inclined to manufacture for themselves, they can do so with success, because they have all the means in their power to erect and to extend at pleasure manufacturing establishments. Our wants being supplied by our own ingenuity and industry, exportation of specie, to pay for foreign manufactures, will cease.

The value of American produce, at this time exported, will not enable the importers to pay for the foreign manufacture imported. Whenever the two accounts shall be fairly stated, the balance against the United States will be found many millions of dollars. Such is the state of things, that the change must be to the advantage of the United States. The precious metals will be attracted to them; the diffusion of which, in a regular and uniform current, through the great arteries and veins of the body politic, will give to each member health and vigor.

In proportion as the commerce of the United States depends on agriculture and manufactures as a common basis, will it increase and become independent of those revolutions and fluctuations, which the ambition and jealousy of foreign Governments are too apt to produce. Our navigation will be quickened; and supported as it will be by internal resources, never before at the command of any nation, will advance to the extent of those resources.

New channels of trade to enterprise, no less important than productive, are opening, which can be secured only by a wise and prudent policy appreciating their advantage.

If want of foresight should neglect the cultivation and improvement of them, the opportune moment may be lost, perhaps, for centuries, and the energies of this nation be thereby prevented from developing themselves, and from making the boon which is proffered our own. By trading on our own capital, collisions with other nations, if they be not entirely done away, will be greatly diminished.

This natural order of things exhibits the commencement of a new epoch, which promises peace, security, and repose, by a firm and steady reliance on the produce of agriculture; on the treasures that are embosomed in the earth; on the genius and ingenuity of our manufactures and mechanics; and on the intelligence and enterprise of our merchants.

The Government, possessing the intelligence and the art of improving the resources of the nation, will increase its efficient powers,

and, enjoying the confidence of those whom it has made happy, will oppose to the assailant of the nation's rights the true, the only invincible ægis, the unity of will and strength. Causes producing war will be few. Should war take place, its calamitous consequences will be mitigated, and the expenses and burdens of such a state of things will fall with a weight less oppressive and injurious on the nation. The expenditures of the last war were greatly increased by a dependence on foreign supplies. The prices incident to such a dependence will always be high.

Had not our nascent manufacturing establishments increased the quantity of commodities at that time in demand, the expenditures would have been much greater, and consequences the most fatal and disastrous — alarming even in contemplation — would have been the fate of this nation. The experience of the past teaches a lesson never to be forgotten, and points emphatically to the remedy. A wise Government should heed its admonitions, or the independence of this nation will be exposed to "the shafts of fortune."

IV. The Tariff Controversy of 1824

A. *The "American System"* [1]

Congress, in 1816, provided for a 25 per cent. duty on cottons and woolens, and this rate of duty was re-established in 1818. At the earlier date the members of Congress were in general agreement that certain manufacturing industries of the country needed to be protected, but by 1824, serious opposition to this principle had risen in the south and in certain sections of New England.

During the debates on the tariff in 1824, the representatives from these two sections very generally opposed, while those from the Middle States and the west favored, the principles of protection. Henry Clay, of Kentucky, laid down the principle of the "American System." He argued that the prosperity of the whole country depended on protection. In his opinion the system would provide not only work for laborers, but also markets for the farmers' produce.

Two classes of politicians divide the people of the United States. According to the system of one, the produce of foreign industry should be subjected to no other impost than such as may be necessary to provide a public revenue; and the produce of American industry should be left to sustain itself, if it can, with no other than that incidental protection, in its competition, at home as well as abroad, with rival foreign articles. According to the system of the other class, whilst they agree that the imposts should be mainly, and may, under any modification, be safely relied on as a fit and convenient source of

[1] *Annals of Congress*, 1823–4 (Washington, 1856), 1962–72.

public revenue, they would so adjust and arrange the duties on foreign fabrics as to afford a gradual but adequate protection to American industry, and lessen our dependence on foreign nations, by securing a certain, and, ultimately, a cheaper and better supply of our own wants from our own abundant resources. Both classes are equally sincere in their respective opinions, equally honest, equally patriotic, and desirous of advancing the prosperity of the country. . . .

. . . The greatest want of civilized society is a market for the sale and exchange of the surplus of the produce of the labor of its members. This market may exist at home or abroad, or both, but it must exist somewhere, if society prospers; and wherever it does exist, it should be competent to the absorption of the entire surplus of production. It is most desirable that there should be both a home and a foreign market. But, with respect to their relative superiority, I cannot entertain a doubt. The home market is first in order, and paramount in importance. . . .

Both the inability and the policy of foreign Powers, then, forbid us to rely upon the foreign market as being an adequate vent for the surplus produce of American labor. Now, let us see if this general reasoning is not fortified and confirmed by the actual experience of this country. If the foreign market may be safely relied upon as furnishing an adequate demand for our surplus produce, then the official document will show a progressive increase, from year to year in the exports of our native produce. . . . If, on the contrary, we shall find from them that, for a long term of past years, some of our most valuable staples have retrograded, some remained stationary, and others advanced but little, if any, in amount, with the exception of cotton, the deductions of reason and the lessons of experience will alike command us to withdraw our confidence in the competency of the foreign market. The total amount of all our exports of domestic produce for the year, beginning in 1795, and ending on the 30th September, 1796, was $40,764,097. Estimating the increase according to the ratio of the increase of our population, that is at 4 per cent. per annum, the amount of the exports of the same produce in the year ending on the 30th September last, ought to have been $85,420,861. It was in fact only $47,155,408. Taking the average of five years, from 1803 to 1807, inclusive, the amount of native produce exported was $43,202,751 for each of those years. Estimating what it ought to have been, during the last year, applying the principle suggested to that amount, there should have been exported $77,766,751, instead of $47,155,408. . . .

Is this foreign market, so incompetent at present, and which, limited as its demands are, operates so unequally upon the productive labor of our country, likely to improve in future? If I am correct in the views which I have presented to the Committee, it must become worse and worse. What can improve it? Europe will not abandon her own agriculture to foster ours. We may even anticipate that she will more and more enter into competition with us in the supply of the West India market. That of South America, for articles of subsistence, will probably soon vanish. The value of our exports, for the future, may remain at about what it was last year. But if we do not create some new market; if we persevere in the existing pursuits of agriculture; the inevitable consequence must be to augment greatly the quantity of our produce, and to lessen its value in the foreign market. . . .

The creation of a home market is not only necessary to procure for our agriculture a just reward of its labors, but it is indispensable to obtain a supply of our necessary wants. If we cannot sell, we cannot buy. That portion of our population (and we have seen that it is not less than four-fifths) which makes comparatively nothing that foreigners will buy, has nothing to make purchases with from foreigners. It is in vain that we are told of the amount of our exports, supplied by the planting interest. They may enable the planting interest to supply all its wants; but they bring no ability to the interests not planting, unless, which cannot be pretended, the planting interest was an adequate vent for the surplus produce of the labor of all other interests. It is in vain to tantalize us with the greater cheapness of foreign fabrics. There must be an ability to purchase, if an article be obtained, whatever may be the price, high or low, at which it is sold. And a cheap article is as much beyond the grasp of him who has no means to buy, as a high one. Even if it were true that the American manufacturer would supply consumption at dearer rates, it is better to have his fabrics than the unattainable foreign fabrics; for it is better to be ill supplied than not supplied at all. . . . But this home market, highly desirable as it is, can only be created and cherished by the protection of our own legislation against the inevitable prostration of our industry, which must ensue from the action of foreign policy and legislation. The effect and the value of this domestic care of our own interests will be obvious from a few facts and considerations. Let us suppose that half a million of persons are now employed abroad, in fabricating for our consumption those articles of which, by the operation of this

bill, a supply is intended to be provided within ourselves. That half a million of persons are, in effect, subsisted by us; but their actual means of subsistence are drawn from foreign agriculture. If we could transport them to this country, and incorporate them in the mass of our own population, there would instantly arise a demand for an amount of provisions equal to that which would be requisite for their subsistence throughout the whole year. That demand, in the article of flour alone, would not be less than the quantity of about 900,000 barrels, besides a proportionate quantity of beef and pork, and other articles of subsistence. But 900,000 barrels of flour exceeded the entire quantity exported last year, by nearly 150,000 barrels. What activity would not this give? What cheerfulness would it not communicate to our now dispirited farming interest? But if, instead of these five hundred thousand artisans emigrating from abroad, we give, by this bill, employment to an equal number of our own citizens now engaged in unprofitable agriculture, or idle, from the want of business, the beneficial effect upon the productions of our farming labor would be nearly doubled. The quantity would be diminished by a subtraction of the produce from the labor of all those who should be diverted from its pursuits to manufacturing industry, and the value of the residue would be enhanced, both by that diminution and the creation of the home market to the extent supposed.

B. *A New Englander's Views on Protection* [1]

Daniel Webster of Massachusetts opposed a protective tariff at this time, and he gave two reasons for so doing as follows:

Being intrusted with the interests of a district highly commercial, and deeply interested in manufactures also, I wish to state my opinions on the present measure; not as on a whole, for it has no entire and homogeneous character; but as on a collection of different enactments, some of which meet my approbation, and some of which do not. . . .

. . . [I]n the first place, what is the condition of our commerce? Here we must clearly perceive that it is not enjoying that rich harvest which fell to its fortune during the continuance of the European wars. It has been greatly depressed, and limited to small profits. Still, it is elastic and active, and seems capable of recovering itself in some

[1] *Annals of Congress*, 1823–4 (Washington, 1856), 2027, 2034–5, 2053–4, 2056–7.

measures from its depression. The shipping interest, also, has suffered severely, still more severely, probably, than commerce. If anything should strike us with astonishment, it is that the navigation of the United States should be able to sustain itself. Without any government protection whatever, it goes abroad to challenge competition with the whole world; and, in spite of all obstacles, it has yet been able to maintain 800,000 tons in the employment of foreign trade. How, sir, do the ship-owners and navigators accomplish this? How is it that they are able to meet, and in some measure overcome, universal competition? Not, sir, by protection and bounties, but by unwearied exertion, by extreme economy, by unshaken perseverance, by that manly and resolute spirit which relies on itself to protect itself. These causes alone enable American ships still to keep their element, and show the flag of their country in distant seas. . . . I need not say that the navigation of the country is essential to its honor and its defense. Yet, instead of proposing benefit for it in this hour of its depression, we propose by this measure to lay upon it new and heavy burdens. In the discussion, the other day, of that provision of the bill which proposes to tax tallow for the benefit of the oil merchants and whalemen, we had the pleasure of hearing eloquent eulogiums upon that portion of our shipping employed in the whale fishery, and strong statements of its importance to the public interest. But the same bill proposes a severe tax upon that interest for the benefit of the iron manufacturer and the hemp grower. So that the tallow chandlers and soapboilers are sacrificed to the oil merchants, in order that these again may contribute to the manufacturers of iron and the growers of hemp.

If such be the state of our commerce and navigation, what is the condition of our home manufactures? How are they amidst the general depression? Do they need further protection? and if any, how much? On all these points, we have had much general statement, but little precise information. In the very elaborate speech of Mr. Speaker, [Henry Clay of Kentucky] we are not supplied with satisfactory grounds of judging in these various particulars. Who can tell, from anything yet before the committee, whether the proposed duty be too high or too low, on any one article? Gentlemen tell us that they are in favor of domestic industry; so am I. They would give it protection; so would I. But then all domestic industry is not confined to manufactures. The employments of agriculture, commerce, and navigation, are all branches of the same domestic industry; they all furnish employment for American capital and

American labor. And when the question is, whether new duties shall be laid, for the purpose of giving further encouragement to particular manufactures, every reasonable man must ask himself, both, whether the proposed new encouragement be necessary, and, whether it can be given without injustice to other branches of industry. . . .

I will now proceed, sir, to state some objections which I feel, of a more general nature, to the course of Mr. Speaker's observations.

He seems to me to argue the question as if all domestic industry were confined to the production of manufactured articles; as if the employment of our own capital, and our own labor, in the occupations of commerce and navigation, were not as emphatically domestic industry as any other occupation. Some other gentlemen, in the course of the debate, have spoken of the price paid for every foreign manufactured article, as so much given for the encouragement of foreign labor, to the prejudice of our own. But is not every such article the product of our own labor as truly as if we had manufactured it ourselves? Our labor has earned it, and paid the price for it. It is so much added to the stock of national wealth. If the commodity were dollars, nobody would doubt the truth of this remark: and it is precisely as correct in its application to any other commodity as to silver. One man makes a yard of cloth at home; another raises agricultural products, and buys a yard of imported cloth. Both these are equally the earnings of domestic industry, and the only questions that arise in the case are two: the first is, which is the best mode, under all the circumstances, of obtaining the article; the second is, how far this first question is proper to be decided by the government, and how far it is proper to be left to individual discretion. There is no foundation for the distinction which attributes to certain employments the peculiar appellation of American industry; and it is, in my judgment, extremely unwise, to attempt such discriminations. . . .

Let me now ask, sir, what relief this bill proposes to some of those great and essential interests of the country, the condition of which has been referred to as proof of national distress; and which condition, although I do not think it makes out a case of distress, yet does indicate depression.

And first, as to our foreign trade. The Speaker has stated that there has been a considerable falling off in the tonnage employed in that trade. This is true, lamentably true. In my opinion,

it is one of those occurrences which ought to arrest our immediate, our deep, our most earnest attention. What does this bill propose for its relief? Sir, it proposes nothing but new burdens. It proposes to diminish its employment, and it proposes, at the same time, to augment its expense, by subjecting it to heavier taxation. Sir, there is no interest, in regard to which a stronger case for protection can be made out, than the navigating interest. Whether we look at its present condition, which is admitted to be depressed; the number of persons connected with it, and dependent upon it for their daily bread; or its importance to the country in a political point of view, it has claims upon our attention which cannot be exceeded. But what do we propose to do for it? I repeat, sir, simply to burden and to tax it. By a statement which I have already submitted to the Committee, it appears that the shipping interest pays, annually, more than half a million of dollars in duties on articles used in the construction of ships. We propose to add nearly, or quite, fifty per cent. to this amount, at the very moment that we bring forth the languishing state of this interest, as a proof of national distress. Let it be remembered that our shipping employed in foreign commerce, has, at this moment, not the shadow of government protection. It goes abroad upon the wide sea to make its own way, and earn its own bread, in a professed competition with the whole world. Its resources are its own frugality, its own skill, its own enterprise. It hopes to succeed, if it shall succeed at all, not by extraordinary aid of government, but by patience, vigilance, and toil. This right arm of the nation's safety strengthens its own muscles by its own efforts, and by unwearied exertion in its own defense becomes strong for the defense of the country.

No one acquainted with this interest can deny that its situation, at this moment, is extremely critical. We have left it hitherto to maintain itself or perish; to swim if it can, and to sink if it cannot. But at this moment of its apparent struggle, can we, as men, can we, as patriots, add another stone to the weight that threatens to carry it down? Sir, there is a limit to human power and to human effort. I know the commercial marine of this country can do almost everything, and bear almost everything. Yet some things are impossible to be done; and some burdens may be impossible to be borne; and as it was the last ounce that broke the back of the camel, so the last tax, although it were even a small one, may be decisive as to the power of our marine to sustain the conflict in which it is now engaged with all the commercial nations on the globe.

C. *A Southern View on the Tariff* [1]

The southern representatives very generally opposed the protective tariff. One of them, George McDuffie, of South Carolina, spoke against it as follows:

Looking to the operation of this measure upon the different classes of the community, it may be fairly stated as its general result, that it will sacrifice the laboring classes for the benefit of the capitalists. And when I say capitalists, I include as well those who employ capital in some of the products of agriculture, as in manufactures. You propose to protect, by duties, not only manufactures, but wool, hemp, and even grain. Ridiculous as the duty upon this last article is, it serves admirably to illustrate the genius of the system.

Although the manufacturing interest makes the most prominent figure in this scheme of protection, the question is no longer between the manufacturing and agricultural interests, but between all those who produce more than they consume of the articles subject to duty, and those who purchase that surplus production. From this it is obvious, that but a very small part of the community can enjoy the benefit of this system, which operates as a permanent tax upon the remainder. As to the manufacturers we know their number is exceedingly small in comparison with the aggregate of our population. But the smallness of the number of farmers who can be benefited by this bill, is not so obvious. There exists a delusion on this point, which is easily removed. It is supposed that the great mass of the farmers will participate in the bounties provided. But every practical observer must know, in relation to wool, for example, that a great majority of the farmers can produce no more than they consume in their own families. It will be the more wealthy farmers, therefore, who will realize the advantages, such as they may be, of this compromise with the manufacturers, while the small farmers and the whole class of mere laborers will be compelled to bear the burdens of the system, such as they certainly are, without the slightest equivalent.

No man has pretended, no man will venture to assert, that the price of labor will be increased by this measure. That, sir, the thing which most deserves encouragement, is left unbountied to its fate. I do pronounce it, that this is a combination, not only of the few against the many, but of the wealthy against the poor; we take from those who have not, and give to those who have. I speak with studied precision when I say, that those who consume what they do not make,

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[1] *Annals of Congress*, 1823–4 (Washington, 1856), 2421, 2426.

are taxed for the benefit of those who make what they do not consume. These are the true antagonist powers of this system. . . .

It would be some consolation to me, sir, if I could believe that the heavy impositions, which must operate so oppressively upon the part of the Union I have the honor to represent, would produce an equivalent benefit to other portions of the Union. If my constituents must be sacrificed, it would in some degree soothe their injured feelings, if they could have this excuse, at least, for quietly submitting to their fate, hard as it is, and unjust as they believe it to be. But even this humble consolation is denied us. We are doomed to suffer, under a clear conviction that our sufferings will administer no relief to the distresses, whether real or imaginary, of any portion of our fellow-citizens. We are to be made the victims of a system "which not enricheth them, but makes us poor indeed"— a system which wages war, not against our enemies, but our friends; not against the hostile regulations of other countries, but against the advantages of our natural position in the world, and the munificent bounties of an all-wise Providence — a system which has originated in discontent, and must inevitably end in disappointment. . . .

V. Free Trade Arguments

Memorial on Free Trade, 1831 [1]

After the passage of the "abomination" tariff bill in 1828, those opposed to the system set about to educate public opinion as to the merits of free trade. Accordingly, in 1831, a free trade convention was held in the city of Philadelphia, and at its request a free trade memorial was drawn up by Albert Gallatin and presented to Congress. The important parts of this memorial are as follows:

We are not called upon to discuss the abstract question, whether another mode of taxation would be more eligible than the impost, or whether an unrestrained intercourse between all nations, free of the payment of any duties on imports, would be best calculated to promote the industry and prosperity of all. On that subject, the experience of forty years is conclusive so far as relates to the United States. The people prefer, in time of peace, duties raised on the importation of foreign merchandise, to any internal tax, direct or indirect. Whether for good or for evil, that system affords an encouragement to domestic manufactures not less efficient for being incidental. Duties on imports, amounting on an average to about 20 per cent. on the value, appear

[1] *Gallatin's Free Trade Memorial.* Senate Documents, 1831–2 (Washington, 1832), I, Doc. 55, pp. 6–8, 11.

necessary to the support of Government. Although they may, to that extent, by diverting national industry from its natural channels, render it less productive; although they may, to that extent, lay a tax on the consumers in addition to that which is paid to Government; although they operate unequally on different sections of the country; all your memorialists ask, is, that the evil shall not be aggravated by an inequality in the rates of duty. The question then at issue is, simply whether the amount wanted shall be so raised as to fall equally upon all the consumers, or, in other words, on the community, and so as to encourage equally every branch of industry, or whether certain branches shall receive special protection by high and sometimes prohibitory duties. . . .

Let it, however, be recollected, that even the general benefit arising to the country at large, may not always be a sufficient justification of great and important deviations from the equal and uniform system of taxation. A government which acknowledges the principle that no individual can be divested of his property for public purposes without indemnity, cannot claim the right to do that indirectly, which it is forbidden to do directly. A system calculated to lay permanent burdens, greatly unequal and oppressive on some classes of society, or on a particular section of the country, would be radically unjust, and altogether indefensible, even though it might be, attended with some advantages to the community, considered as a whole. But whether such advantages are in fact realized; whether, on any supposition, they ever can produce a profit equal to the actual national loss arising even from the indispensable duty of 20 to 25 per cent., must be first examined.

It is self-evident that the industry of a country is most profitably employed, or, in other words, that a country acquires the greatest wealth, and its general prosperity is most advanced, in proportion as its capital and labor are most productive.

It is not less obvious that, if a given amount of capital and labor produces in the same time, a less quantity of a certain commodity than could have been purchased with that quantity of another article which might have been produced in the same time by the same amount of capital and labor, there has been a misapplication of such capital and labor, and a national loss equal to the difference between the quantity produced, and that which might have been purchased, with the proceeds of the same capital and labor otherwise applied.

If the price at which a commodity can be afforded by the person who undertakes to produce it is higher than that at which it may be,

or might have been purchased from others, the difference of price is the measure of the national loss incurred by his misapplication of capital and labor to the production of that commodity. . . .

The difference between the price at which a manufacturer can afford to sell the whole amount of the commodities produced by him in one year, and that at which the same quantity of the same articles may be, or might have been, purchased from others, is therefore equal to the annual national profit or loss resulting from his application of capital and labor to that instead of any other branch of industry.

When the new manufacturer has to compete with others of the same country, or, if there is no duty on imports, with foreign manufacturers, as it is impossible for him to sell cloth of the same quality at a higher price than it can be obtained from others, the loss must necessarily fall on him. This is not the less a public loss on that account. On whomsoever this may fall, a diminution of the quantity or exchangeable value of the commodities which, with the same capital and labor, otherwise applied, might have been produced, is so much retrenched from what would otherwise have been an accumulation of capital or national wealth. . . .

It is impossible that the state of the country should have been such as that its capital and labor could not have been more advantageously applied, than to branches of industry, which, left to themselves, were attended with actual loss, without a corresponding great and sensible diminution in the demand for capital and the wages of labor, neither of which has been felt. So long as those wages suffer no diminution, and so long as those employed in commercial and even agricultural pursuits continue to borrow large capitals at the rate of six per cent. a year, it is clear proof that those pursuits afford profits at least equal to that rate of interest, and that an application of capital and labor to the production of objects, on which, if not artificially protected, a loss is experienced, is not at all necessary.

VI. The Tariff and Sectionalism

A View of the Situation, 1824-1833[1]

By 1832 the issue of a protective tariff had become distinctively sectional. The south felt that it was being discriminated against by Congress. The southern

[1] *Thirty Years' View.* By Thomas H. Benton (New York, 1854–6), I, 97, 101–2.

states lagged behind their northern neighbors industrially, and the protective tariff was assigned by their statesmen as the reason for this difference in prosperity. Senator Benton of Missouri put the claim of the south as follows:

The question of a protective tariff had now not only become political, but sectional. In the early years of the federal government it was not so. The tariff bills, as the first and the second that were passed, declared in their preambles that they were for the encouragement of manufactures, as well as for raising revenue; but then the duties imposed were all moderate — such as a revenue system really required; and there were no "*minimums*," to make a false basis for the calculation of duties, by enacting that all which cost less than a certain amount should be counted to have cost that amount; and be rated at the custom-house accordingly. In this early period the Southern States were as ready as any part of the Union in extending the protection to home industry which resulted from the imposition of revenue duties on rival imported articles, and on articles necessary to ourselves in time of war; and some of her statesmen were amongst the foremost members of Congress in promoting that policy. As late as 1816, some of her statesmen were still in favor of protection, not merely as an incident to revenue, but as a substantive object: and among these was Mr. Calhoun, of South Carolina — who even advocated the minimum provision — then for the first time introduced into a tariff bill, and upon his motion — and applied to the cotton goods imported. After that year (1816) the tariff bills took a sectional aspect — the Southern States, with the exception of Louisiana (led by her sugar-planting interest), against them: the New England States also against them: the Middle and Western States for them. After 1824 the New England States (always meaning the greatest portion when a section is spoken of) classed with the protective States — leaving the South alone, as a section, against that policy. . . .

Allusions were constantly made [in the debates] to the combination of manufacturing capitalists and politicians in pressing this bill. There was evidently foundation for the imputation. The scheme of it had been conceived in a convention of manufacturers in the State of Pennsylvania, and had been taken up by politicians, and was pushed as a party measure, and with the visible purpose of influencing the presidential election. In fact these tariff bills, each exceeding the other in its degree of protection, had become a regular appendage of our presidential elections — coming round in every cycle of four years, with that returning event. The year 1816 was the starting point:

1820, and 1824, and now 1828, having successively renewed the measure, with successive augmentations of duties. The South believed itself impoverished to enrich the North by this system; and certainly a singular and unexpected result had been seen in these two sections. In the colonial state, the Southern were the rich part of the colonies, and expected to do well in a state of independence. They had the exports, and felt secure of their prosperity: not so of the North, whose agricultural resources were few, and who expected privations from the loss of British favor. But in the first half century after Independence this expectation was reversed. The wealth of the North was enormously aggrandized: that of the South had declined. Northern towns had become great cities: Southern cities had decayed, or become stationary; and Charleston, the principal port of the South, was less considerable than before the Revolution. The North became a money-lender to the South, and southern citizens made pilgrimages to northern cities, to raise money upon the hypothecation of their patrimonial estates. And this in the face of a southern export since the Revolution to the value of eight hundred millions of dollars! — a sum equal to the product of the Mexican mines since the days of Cortez! and twice or thrice the amount of their product in the same fifty years. The Southern States attributed this result to the action of the federal government — its double action of levying revenue upon the industry of one section of the Union and expending it in another — and especially to its protective tariffs. To some degree this attribution was just, but not to the degree assumed; which is evident from the fact that the protective system had then only been in force for a short time — since the year 1816; and the reversed condition of the two sections of the Union had commenced before that time. Other causes must have had some effect: but for the present we look to the protective system; and, without admitting it to have done all the mischief of which the South complained, it had yet done enough to cause it to be condemned by every friend to equal justice among the States — by every friend to the harmony and stability of the Union — by all who detested sectional legislation — by every enemy to the mischievous combination of partisan politics with national legislation. And this was the feeling with the mass of the democratic members who voted for the tariff of 1828, and who were determined to act upon that feeling upon the overthrow of the political party which advocated the protective system; and which overthrow they believed to be certain at the ensuing presidential election.

VII. A Temporary Adjustment of Conflicting Interests

The Compromise Tariff of 1833[1]

South Carolina's opposition to the tariff measure of 1832, and her threat to withdraw from the Union unless the tariff was modified, caused Congress in 1833 to lower the duties on imported articles. Mr. Clay brought forward a compromise measure, in which, many of his friends declared, he abandoned his American system. Clay, himself, denied that such was the case; he insisted that a modification of the tariff would not destroy the system, but save it; that it would allay distrust and allow time for its principles to become known throughout the country. Portions of Mr. Clay's speech are as follows:

In presenting the modification of the tariff laws which I am about to submit, I have two great objects in view. My first object looks to the tariff. I am compelled to express the opinion, formed after the most deliberate reflection, and on a full survey of the whole country, that, whether rightfully or wrongfully, the tariff stands in imminent danger. . . . The fall of the policy, sir, would be productive of consequences calamitous indeed. When I look to the variety of interests which are involved, to the number of individuals interested, the amount of capital invested, the value of the buildings erected, and the whole arrangement of the business for the prosecution of the various branches of the manufacturing art which have sprung up under the fostering care of this government, I cannot contemplate any evil equal to the sudden overthrow of all those interests. History can produce no parallel to the extent of the mischief which would be produced by such a disaster. . . .

It is well known that the majority of the dominant party is adverse to the tariff. . . . But for the exertions of the other party, the tariff would have been long since sacrificed. Now let us look at the composition of the two branches of Congress at the next session. In this body we lose three friends of the protective policy, without being sure of gaining one. Here, judging from the present appearances, we shall, at the next session, be in the minority. In the House it is notorious that there is a considerable accession to the number of the dominant party. How, then, I ask, is the system to be sustained against numbers, against the whole weight of the administration, against the united South, and against the increased impending danger or civil war? . . .

. . . I have been represented as the father of this system, and I am charged with an unnatural abandonment of my own offspring.

[1] *Congressional Debates*, 1832–3 (Washington, 1833), 462, 733.

I have never arrogated to myself any such intimate relation to it. I have, indeed, cherished it with parental fondness, and my affection is undiminished. But in what condition do I find this child? It is in the hands of the Philistines, who would strangle it. I fly to its rescue, to snatch it from their custody, and to place it on a bed of security and repose for nine years, where it may grow and strengthen, and become acceptable to the whole people. I behold a torch about being applied to a favorite edifice, and I would save it, if possible, before it was wrapt in flames, or at least preserve the precious furniture which it contains. I wish to see the tariff separated from the politics of the country, that business men may go to work in security, with some prospect of stability in our laws, and without everything being staked on the issue of elections, as it were on the hazards of the die.

VIII. Reaction from Protection

Arguments for Lower Duties on Imports, 1845 [1]

The Compromise Tariff Act of 1833 provided that the duties exceeding 20 per cent. should be reduced gradually until on July 1, 1842, they should be at a uniform level of 20 per cent. By that time, however, the Whigs were in power, and as soon as the term of the Compromise had been fulfilled, they imposed a protective tariff similar to the one of 1832. In 1844 the Democrats were successful; and that party was pledged to lower the tariff. Accordingly, Secretary of the Treasury, Robert J. Walker, in his annual report proposed to Congress a radical reduction in the tariff, and the arguments supporting his proposal were as follows:

The receipts for the first quarter of this year are less, by $2,011,-885 90, than the receipts of the same quarter last year. Among the causes of decrease is the progressive diminution of the importation of many highly-protected articles, and the substitution of rival domestic products. For the nine months ending June 30, 1843, since the present tariff, the average of duties upon dutiable imports was equal to 37.84 $\frac{1}{10}$ per cent.; for the year ending June 30, 1844, 33.85 $\frac{9}{10}$ per cent.; and for the year ending June 30, 1845, 29.90 per cent. — showing a great diminution in the average percentage, owing in part to increased importation of some articles bearing the lighter duties, and decreased importation of others bearing the higher duty. . . .

In suggesting improvements in the revenue laws, the following principles have been adopted:

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[1] *Treasury Report, 1845* (Washington, 1846), 3–5, 7–10.

1st. That no more money should be collected than is necessary for the wants of the government, economically administered.

2d. That no duty be imposed on any article above the lowest rate will yield the largest amount of revenue.

3d. That below such rate discrimination may be made, descending in the scale of duties; or, for imperative reasons, the article may be placed in the list of those free from all duty.

4th. That the maximum revenue duty should be imposed on luxuries.

5th. That all minimums, and all specific duties, should be abolished, and ad valorem duties substituted in their place — care being taken to guard against fraudulent invoices and under-valuation, and to assess the duty upon the actual market value.

6th. That the duty should be so imposed as to operate as equally as possible throughout the Union, discriminating neither for nor against any class or section.

No horizontal scale of duties is recommended; because such a scale would be a refusal to discriminate for revenue, and might sink that revenue below the wants of the government. Some articles will yield the largest revenue at duties that would be wholly or partially prohibitory in other cases. Luxuries, as a general rule, will bear the highest revenue duties: but even some very costly luxuries, easily smuggled, will bear but a light duty for revenue; whilst other articles, of great bulk and weight, will bear a higher duty for revenue. There is no instance within the knowledge of this department of any horizontal tariff ever having been enacted by any one of the nations of the world. There must be discrimination for revenue, or the burden of taxation must be augmented, in order to bring the same amount of money into the treasury. It is difficult, also, to adopt any arbitrary maximum to which an inflexible adherence must be demanded in all cases. Thus, upon brandy and spirits, a specific duty, varying as an equivalent ad valorem from 180 to 261 per cent., yields a large revenue; yet no one would propose either of these rates as a maximum. These duties are too high for revenue, from the encouragement they present for smuggling these baneful luxuries; yet a duty of 20 per cent. upon brandy and spirits would be far below the revenue standard, would greatly diminish the income on these imports, require increased burdens upon the necessaries of life, and would revolt the moral sense of the whole community. There are many other luxuries which will bear a much higher duty for revenue than 20 per cent.; and the only true maximum is that which

experience demonstrates will bring, in each case, the largest revenue at the lowest rate of duty. Nor should maximum revenue duties be imposed upon all articles; for this would yield too large an income, and would prevent all discrimination within the revenue standard, and require necessaries to be taxed as high as luxuries. But, whilst it is impossible to adopt any horizontal scale of duties, or even any arbitrary maximum, experience proves that, as a general rule, a duty of 20 per cent. ad valorem will yield the largest revenue. There are, however, a few exceptions above, as well as many below this standard. Thus, whilst the lowest revenue duty on most luxuries exceeds 20 per cent., there are many costly articles of small bulk, easily smuggled, which would bring, perhaps, no revenue at a duty as high as 20 per cent.; and even at the present rate of $7\frac{1}{2}$ per cent., they yield, in most cases, a small revenue; whilst coal, iron, sugar, and molasses, articles of great bulk and weight, yielded last year six millions of revenue, at an average rate of duty exceeding 60 per cent. ad valorem. There duties are far too high for revenue upon all these articles, and ought to be reduced to the revenue standard; but if Congress desire to obtain the largest revenue from duties on these articles, those duties, at the lowest rate for revenue, would exceed 20 per cent. ad valorem. . . .

In arranging the details of the tariff, it is believed that the maximum revenue duties should be imposed upon luxuries. It is deemed just that taxation, whether direct or indirect, should be as nearly as practicable in proportion to property. If the whole revenue were raised by a tax upon property, the poor, and especially those who live by the wages of labor, would pay but a very small portion of such tax; whereas, by the tariff, the poor, by the consumption of various imports, or domestic articles enhanced in price by the duties, pay a much larger share of the taxes than if they were collected by an assessment in proportion to property. To counteract, as far as possible, this effect of the tariff — to equalize its operation, and make it approximate as nearly as may be to a system of taxes in proportion to property — the duties upon luxuries, used almost exclusively by the rich, should be fixed at the highest revenue standard. This would not be discriminating in favor of the poor, however just that might be within the revenue limit; but it would mitigate, as far as practicable, that discrimination against the poor which results from every tariff, by compelling them to pay a larger amount of taxes than if assessed and collected on all property in proportion to its value. In

accordance with these principles, it is believed that the largest practicable portion of the aggregate revenue should be raised by maximum revenue duties upon luxuries, whether grown, produced, or manufactured at home or abroad.

An appeal has been made to the poor, by the friends of protection, on the ground that it augments the wages of labor. In reply, it is contended that the wages of labor have not augmented since the tariff of 1842, and that in some cases they have diminished.

When the number of manufactories is not great, the power of the system to regulate the wages of labor is inconsiderable; but as the profit of capital invested in manufactures is augmented by the protective tariff, there is a corresponding increase of power, until the control of such capital over the wages of labor becomes irresistible. As this power is exercised from time to time, we find it resisted by combinations among the working classes, by turning out for higher wages, or for shorter time; by trades-union; and in some countries, unfortunately, by violence and bloodshed. But the government, by protective duties, arrays itself on the side of the manufacturing system, and, by thus augmenting its wealth and power, soon terminates in its favor the struggle between man and money — between capital and labor. When the tariff of 1842 was enacted, the maximum duty was 20 per cent. By that act, the average of duties on the protected articles was more than double. But the wages of labor did not increase in a corresponding ratio, or in any ratio whatever. On the contrary, whilst wages in some cases have diminished, the prices of many articles used by the working classes have greatly appreciated.

A protective tariff is a question regarding the enhancement of the profits of capital. That is its object, and not to augment the wages of labor, which would reduce those profits. It is a question of percentage, and is to decide whether money vested in our manufactures shall, by special legislation, yield a profit of ten, twenty, or thirty per cent., or whether it shall remain satisfied with a dividend equal to that accruing from the same capital invested in agriculure, commerce, or navigation.

The present tariff is unjust and unequal, as well in its details as in the principles upon which it is founded. On some articles the duties are entirely prohibitory, and on others there is a partial prohibition. It discriminates in favor of manufactures, and against agriculture, by imposing many higher duties upon the manufactured fabric than upon the agricultural product out of which it is made. It discriminates

in favor of the manufacturer, and against the mechanic, by many higher duties upon the manufacture than upon the article made out of it by the mechanic. It discriminates in favor of the manufacturer, and against the merchant, by injurious restrictions upon trade and commerce; and against the ship-building and navigating interest, by heavy duties on almost every article used in building or navigating vessels. It discriminates in favor of manufactures, and against exports, which are as truly the product of American industry as manufactures. It discriminates in favor of the rich, and against the poor, by high duties upon nearly all the necessaries of life, and by minimums and specific duties, rendering the tax upon the real value much higher on the cheaper than upon the finer article.

Minimums are a fictitious value, assumed by law, instead of the real value; and the operation of all minimums may be illustrated by a single example. Thus, by the tariff of 1842, a duty of 30 per cent. ad valorem is levied on all manufactures of cotton; but the law further provides that cotton goods "not dyed, colored, printed, or stained, not exceeding in value twenty cents per square yard, shall be valued at twenty cents per square yard." If, then, the real value of the cheapest cotton goods is but four cents a square yard, it is placed by the law at the false value of twenty cents per square yard, and the duty levied on the fictitious value — raising it five times higher on the cheap article consumed by the poor, than upon the fine article purchased by the more wealthy. . . .

At least two thirds of the taxes imposed by the present tariff are paid, not into the treasury, but to the protected classes. The revenue from imports last year exceeded twenty-seven millions of dollars. This, in itself, is a heavy tax; but the whole tax imposed upon the people by the present tariff is not less than eighty-one millions of dollars, — of which twenty-seven millions are paid to the government upon the imports, and fifty-four millions to the protected classes, in enhanced prices of similar domestic articles.

This estimate is based upon the position that the duty is added to the price of the import, and also of its domestic rival. If the import is enhanced in price by the duty, so must be the domestic rival; for, being like articles, their price must be the same in the same market. The merchant advances in cash the duty on the import, and adds the duty, with a profit upon it, and other charges, to the price — which must therefore be enhanced to that extent; unless the foreign producer had first deducted the duty from the price. But this is impossible; for such now is, and long has been, the superabundance of

capital and active competition in Europe, that a profit of 6 per cent. in any business is sufficient to produce large investments of money in that business; and if, by our tariff, a duty of 40 per cent. be exacted on the products of such business, and the foreign producer deducts that duty from his previous price, he must sustain a heavy loss. This loss would also soon extend beyond the sales for our consumption to sales to our merchants of articles to be re-exported by them from our ports with a drawback of the duty, which would bring down their price throughout the markets of the world. But this the foreign producer cannot afford. The duty, therefore, must be added to the price, and paid by the consumer, — the duty constituting as much a part of the price as the cost of production. . . .

No prejudice is felt by the Secretary of the Treasury against manufacturers. His opposition is to the protective system, and not to classes or individuals. He doubts not that the manufacturers are sincerely persuaded that the system which is a source of so much profit to them is beneficial also to the country. He entertains a contrary opinion, and claims for the opponents of the system a settled conviction of its injurious effects. Whilst a due regard to the just and equal rights of all classes forbids a discrimination in favor of the manufactures, by duties above the lowest revenue limit, no disposition is felt to discriminate against them by reducing such duties as operate in their favor below that standard. Under revenue duties, it is believed, they would still receive a reasonable profit — equal to that realized by those engaged in other pursuits; and it is thought they should desire no more, at least through the agency of governmental power. Equal rights and profits, so far as laws are made, best conform to the principles upon which the constitution was founded, and with an undeviating regard to which all its functions should be exercised — looking to the whole country, and not to classes or sections.

Soil, climate, and other causes, vary very much, in different countries, the pursuits which are most profitable in each; and the prosperity of all of them will be best promoted by leaving them, unrestricted by legislation, to exchange with each other those fabrics and products which they severally raise most cheaply. This is clearly illustrated by the perfect free trade which exists among all the States of the Union, and by the acknowledged fact that any one of these States would be injured by imposing duties upon the products of the others. It is generally conceded that reciprocal free trade among nations would best advance the interest of all. . . .

IX. Arguments for Protection

The Case Stated, 1849[1]

After the passage of the Walker Tariff Act of 1846, friends of protection kept up an agitation for an increase in the tariff rates. Henry C. Carey, of Philadelphia, one of the best known American economists of the time, writing in 1849, argued for protection as follows:

Why is protection needed? Why cannot trade with foreign nations be carried on without the intervention of custom-house officers? Why is it that that intervention should be needed to enable the loom and the anvil to take their natural places by the side of the plough and the harrow? Such are the questions which have long occupied my mind, and to the consideration of which I now invite my readers.

Of the advantage of perfect freedom of trade, theoretically considered, there could be no doubt. The benefit derived from such freedom in the intercourse of the several States, was obvious to all; and it would certainly seem that the same system so extended as to include the commerce with the various states and kingdoms of the world could not fail to be attended with similar results. Nevertheless, every attempt at so doing had failed. The low duties on most articles of merchandise in the period between 1816 and 1827, had produced a state of things which induced the establishment of the first really protective tariff, that of 1828. The approach to almost perfect freedom of trade in 1840, produced a political revolution, and a similar but more moderate measure, led to the revolution of last year. These were curious facts, and such as were deserving of careful examination.

It may be assumed as an universal truth, that every step made in the right direction will be attended with results so beneficial as to pave the way for further steps in the same direction, and that every one made in the wrong direction will be attended with disadvantageous results tending to produce a necessity for a retrograde movement. The compromise bill, in its final stages, was a near approach to perfect freedom of trade, the highest duty being only 20 per cent. Believing it to be a step in the right direction, one of the enthusiastic advocates of perfect freedom of trade proposed, soon after its passage, that, commencing with 1842, there should be a further reduction of one per cent. per annum for twenty years, at the end of which time all

[1] *Miscellaneous Works* (Harmony of Interests). By Henry C. Carey (Philadelphia, 1872), 3–10.

necessity for custom-houses would have disappeared. With the gradual operation of the earlier stages of that bill there was, however, produced a state of depression so extraordinary as to lead to a political change before reaching its final stages, and the duties had scarcely touched the point of 20 per cent. before they were raised to 30, 50, 60, or more, by the passage of the tariff of 1842. With the election of 1844, the friends of free trade were restored to power, and two years afterwards was passed the tariff of 1846 — the free-trade measure — in which the revenue duty on articles to be protected was fixed at *thirty* per cent. Here was a retrograde movement. Instead of passing from twenty downwards, we went up to thirty, and thus was furnished an admission that so near an approach to free trade with foreign nations as was to be found in twenty per cent. duties had not answered in practice. Since then, it has been admitted, even by the most decided free-trade advocates, that on certain commodities even thirty per cent. was too low, and within six months from the date of the passage of the act of 1846, its author proposed to increase a variety of articles to thirty-five and forty per cent. Here was another retrograde movement. It is now admitted that there are other articles the duties on which require to be raised, and daily experience goes to prove that such must be the case, or we must abandon some of the most important branches of industry. The tendency is, therefore, altogether backward. Thirty per cent. duty is now regarded as almost perfect freedom of trade, and instead of proposing a further annual reduction, each year produces a stronger disposition for a considerable increase. In all this, it is impossible to avoid seeing that there is great error somewhere, and almost equally impossible to avoid feeling a desire to understand why it is that the approaches towards freedom of trade with foreign nations have so frequently failed, and why it is that every strictly revenue tariff is higher than that which preceded it.

With a view to satisfy myself in regard thereto, I have recently made the examination, before referred to, of our commercial policy during the last twenty-eight years, commencing with 1821, being the earliest in relation to which detailed statements have been published. Before commencing to lay before you the results obtained, it may be well to say a few words as to the merits claimed by the two parties for their respective systems.

The one party insists that protection is "a war upon labour and capital," and that by compelling the application of both to pursuits that would otherwise be unproductive, the amount of necessaries, comforts, and conveniences of life obtainable by the labourer is dimin-

ished. The other insists that by protecting the labourer from competition with the ill-fed and worse-clothed workmen of Europe, the reward of labour will be increased. Each has thus his theory, and each is accustomed to furnish facts to prove its truth, and both can do so while limiting themselves to short periods of time, taking at some times years of small crops, and at others those of large ones, and thus it is that the inquirer after truth is embarrassed. No one has yet, to my knowledge, ever undertaken to examine all the facts during any long period of time, with a view to show what have been, under the various systems, the powers of the labourer to command the necessaries and comforts of life. One or other of the systems is true, and that is true under which labour is most largely rewarded: that under which the labourer is enabled to consume most largely of food, fuel, clothing, and all other of those good things for the attainment of which men are willing to labour. If, then, we can ascertain the power of consumption at various periods, and the result be to show that it has invariably increased under one course of action, and as invariably diminished under another, it will be equivalent to a demonstration of the truth of the one and the falsehood of the other. To accomplish this, has been the object of the inquiry in which I have recently been engaged.

It is necessary now to show what have been the distinguishing features of the several systems that have been in operation during the period to be examined. They are as follows: —

First. The tariff of 1816 was a planters' and farmers' measure. Cotton and coarse cotton cloths were carefully protected. Iron itself was well protected, but almost all manufactures of iron, the commodities for the production of which pig or bar iron could be used, were admitted at 20 per cent. Wool paid 15 per cent. Blankets and woolen and stuff goods paid 15 per cent., and finer goods 25 per cent., until 1819, after which they paid but 20 per cent. Spirits paid a heavy specific duty, for the benefit of the farmers; but paper, hats, caps, manufactures of leather, types, and manufactured articles generally, paid only from 20 to 30 per cent. Coal paid 5 cents per bushel, but the commodities in the manufacture of which coal was to be used paid ad valorem duties. Protection was thus given to the coarse commodities that least required it, and refused to those for the production of which the coarser ones were to be used. As a matter of course, its protective features were totally inoperative.

Second. That of 1824, under which iron was, as before, well protected, but manufactures of iron, and of metals generally, were ad-

mitted at 25 per cent. Wool was raised to 20 per cent., to increase, by successive stages, until it reached 30 per cent. Coarse woolens were fixed permanently at 25 per cent. Finer ones were to rise gradually until they reached 33⅓ per cent. Carpets paid from 20 to 50 cents per square yard. Hams paid 3, and butter 5 cents per pound. Potatoes 10, oats 10, and wheat 25 cents per bushel; while scythes, spades, shovels, and other things requisite for the raising of wheat and potatoes, paid 30 per cent. Spirits were carefully protected. Bolting cloths paid 15 per cent. Sail-duck, Osnaburgs, &c., 15 per cent. Cotton cloths paid 25 per cent., with a minimum of 30 cents per yard. The general features of this law did not vary materially from those of that of 1816, although protection was slightly increased.

Third. The first tariff thoroughly protective, and so intended to be, was that of 1828. It continued until 1832, when was passed the first of two laws by which the whole policy of the country was changed. This series constitutes stage the

Fourth. By the act of July 14, 1832, railroad iron was admitted free of duty. Axes, spades, &c., as before, 30 per cent. Bar and pig iron were carefully protected, but a large portion of the commodities for which they were needed were thus admitted without duty, or at the same rate as under our present free-trade tariff. Tea and coffee were free. Silks paid 10 per cent. Wool was protected, but worsted stuff goods were admitted at 10 per cent. Cotton goods paid 25 per cent., with minimums of 30 cents for plain, and 35 for prints. This continued in force until the following March, when was passed *the Compromise Act*, under which linens, stuff goods, silks, and other articles were admitted free of duty, and one-tenth of the excess over 20 per cent. reduced from all other commodities, to take effect December, 1833, with a further similar reduction every two years until 1841, when one-half of the remaining surplus was to be reduced, and the other half in 1842, when no duty would exceed 20 per cent.

Fifth. The protective tariff of 1842, which was followed by

Sixth. The free trade tariff of 1846, now in existence.

We have thus had six different systems, but the first and second differ from each other so little that it is unnecessary to separate the years falling under them, whereas the early years of the Compromise differ so essentially from the two latter that it is expedient to separate them. I shall therefore group the results as follows: —

First. The tariffs of 1816 and 1824, ending with 1829.

Second. That of 1828, commencing with October, 1829, and end-

ing with the period at which the Compromise began to become operative, October, 1834.

Third. The Compromise, commencing with 1835 and ending with 1841.

Fourth. The years 1842 and 1843, the period immediately preceding and following the passage of the act of 1842, being that of the strictly revenue tariff of 20 per cent.

Fifth. The tariff of 1842, commencing June, 1843, and ending June, 1847.

Sixth. That of 1846, commencing June, 1847, and coming down to the present time.

CHAPTER XI

THE WESTWARD MOVEMENT, 1817–1860

I. The Effect on the People of Territorial Expansion

An Explanation of American Characteristics, 1843[1]

Americans have repeatedly been charged by European observers with emphasizing size and magnitude rather than quality, and because of their activities in accumulating wealth they have been called mean and sordid. These same observers have compared the finer tastes of their own countrymen with those of the Americans to the disadvantage of the latter; and in so doing, they have failed to take into account the differences in national life and environment. The Americans conquered a continent in a century and the conquest left them little time for those activities in which the higher classes of Europeans indulged themselves. The very magnitude of the conquest caused them unconsciously to stress size, and in many cases to express the liveliest contempt for the higher refinements of life. In short they were fully occupied in getting a living.

GENTLEMEN travellers and bookmakers, by way of reproach, call us the *trading-nation*, a people devoted to gain; they lament our want of chivalry, our neglect of light amusements; they wonder we do not better support our theatres and other places of public resort, and say we are too sombre and gloomy by half for our national health. They compare New York with London and Paris; Boston and Philadelphia, with Liverpool; new cities, with old; a new, young people, seeking their natural level, with the old, settled, and unchanging population of Europe. Partly for the instruction of such persons, and partly for the satisfaction of dwelling upon this honorable characteristic of our country, we will consider these charges in our pages.

But a few years ago, the country we inhabit was a wilderness. Hardly was the land cleared on the coast, and dotted with towns and villages; hardly had New York, and Boston, and Philadelphia, assumed the name and character of cities, before the great west became an object of interest to our own people, and to the immigrant from foreign lands. The story of the resources of this continent reached

[1] *Hunt's Merchants' Magazine* (New York, 1843), VIII, 164–8. Article by J. N. Bellows, of New Hampshire.

the ears of the starved and oppressed European; a gleam of hope lighted up his care-worn features, as he heard of a free life on a fertile soil, by the banks of wide, navigable rivers, skirted by woods that abounded with gáme, where food, fuel, and peace, could be had for the asking. We had enough to do to welcome our new friends, as every one knows. The wants of a population, increasing in the west by magical numbers, made demands upon the comparatively old portions of the country to supply them. The great canal, connecting the lakes with the Hudson, was one of these wants. The genius of a Clinton devised and planned it, and it is the pattern improvement of this time. The magnitude, completion, and success of it, has given hope and confidence to every subsequent effort of the kind; and it has been of as great benefit in its consequences upon internal improvements, as it has as a high-way for the wealth of the western valleys.

We were, besides, destitute of manufactures, (thanks to the early parental guidance of the mother country,) and were obliged to seek abroad for other means of supplying our new demands. We had no time to give that attention to manufactures which we saw, at a glance, were the great interests of our country. Our population came upon us too rapidly for this; they could not stand naked, and without tools and machinery, while we were putting up the mills to manufacture clothing and supplies for them. They must be imported; the capital of the country was invested in shipping, and the young men flocked to the city and became ship-owners and importers. Our inland towns suffered, and still suffer, the draining off of many of their most promising youth, whom the hope of speedy fortunes and high wages drew to the seaports. Trade became the business of the country from an absolute necessity.

As soon as we had breathing-time, we turned our attention to manufactures; that is, as soon as the young men could be spared, and the capital could be spared or made. Then, in places where water-power was abundant, towns and villages sprung into being, and employed not only the labors of the young men, but the young women, to such an extent, that cooks and chambermaids became scarce; and, at this time, the majority of those who are technically called servants, in the houses of the opulent, are foreigners, the natives being employed, for the most part, on the farms and in the factories.

Our position with regard to other people, has forced us to do everything in a hurry. Our company came so soon, we had hardly time to put ourselves into trim to receive visitors. As a nation, we are much in the same predicament with the lady without "help," who

consequently does her own work and "chores," upon whom a carriage load of fashionable visitors arrives while she is cooking dinner. Hearing the bell, and thinking it is the children just come home from school, she runs to open the door herself. Finding her mistake, she, like a sensible woman, covers her confusion not by apologies and lies, but by making herself as agreeable as she can, and her guests go away and call her a slattern and other hard names; when, if they knew all the circumstances, they would consider her an angel. We trust, from this statement of facts, that it can be seen why we are a trading-nation; why so large a part of our population is engaged in a way that make them averse to spending their leisure time at theatres and in jovial parties.

If we are, then, by the necessity of the case, in consequence of our youth, much engaged in trade, it can easily be seen why we are not, in the popular sense of the word, a chivalrous people. War, love of conquest, the profession of arms, nurture chivalry. The chivalry of the ancients, and the remains of the spirit of knighthood in Europe, at this time, is the refinement which taste throws over a radically bad principle; an attempt to adorn, with a show of justice and equity, what, at the bottom, is but a blood-thirsty preference of self to human rights. It is all of a piece with the drapery of thrones and the imposing magnificence of rank and title, which exist only by cruel want somewhere. For we suppose that it must be a law of nature, that every waste and extravagance deprives some one of comfort; and the present condition of the laboring classes in Europe, is a sufficient verification of our remark. We are not a chivalrous people, then, and do not wear swords and plumes; we discountenance duelling, and live under the protection of laws we have ourselves made. We do not recognise any difference between the law of honor and the law of God, and say that every custom, inconsistent with the latter, is of course so with the former. We take credit for having made this advance in morals, and believe it is the natural fruit of our Christian origin.

Now, the Spaniard is a chivalrous character, and the decayed nobility of Italy are patterns of chivalry, though steeped to the lips in poverty; "too proud to work, they nobly starve." Thank heaven! there is none of this spirt in our industrious population; and, least of all, is there any one so destitute of common sense as to view the employments of trade as beneath his dignity. We read of such men in fiction, and even then we give them a fictitious pity. That any poor, mortal man, born into this world of trial and struggle, should have the notion that some accident of birth exempts him from exertion, and that an honest livelihood, wrought out by his own energies, is inferior to

dronish dependence and proud poverty, fills us with commiseration and disgust. That trade should be undervalued by the very men who owe their greatness to it; that any Englishman, of all others, should sneer at what has made his country what she is, is surprising indeed. For, to what does England owe her rank among the nations of the globe, if not to the extensive enterprise of her merchants? Take from her her commerce, and how infinitely inferior she would be to France, one-fourth of whose soil is worth more than all the British empire can boast of possessing. The territory of England is the Atlantic and Pacific oceans; her ships are the ploughs of these watery soils, and from them she reaps her great harvests. Her wealth is her power, and it is a wealth heaped up for her by her merchants. Why has Spain lost the position she once held among nations? Her commerce has been interrupted by fatal intestine wars. Property has had no security; and the nation, step by step, has declined. France has not yet recovered from her wasting revolutions, and the derangement of her trade is one of the sorest evils of her commotions. It is the condition of the mercantile class that furnish the best test of the condition of a country, because every nation owes its life to this interest; and it is because we know this by experience and philosophy, that the majority of our people turn their attention to trade as the surest road to national prosperity.

It is somewhat remarkable, that the English people hold, as a standing jest, the tendency to bargaining and money-getting among the Scotch. Whether they allow other people to laugh at Sawney, is a question. But there is little doubt that the English nation owes much to Scotland. Her men of genius have oftener boasted a Scottish or Irish origin than an English one. Her orators, her poets and legislators, have been born oftener than otherwise among the people she pretends to despise, or the people she is not too proud to oppress. No one may say how much, at this very moment, England owes to the canny Scot, and the warm-hearted son of Erin; the one of whom she derides, and the other subdues. . . .

In due time, no doubt, we shall have the arts in some perfection. Our architecture will improve as we have wealth and leisure to give heed to the elegancies of life; but we trust that we shall always estimate such matters as the Croton aqueduct as of far greater consequence than statues and pictures; that before we have a national gallery, we shall have asylums for the blind and the insane; and study what is due to the wants of the whole people, before we undertake to gratify the taste of foreigners, and the few travellers who, forming a

taste for certain luxuries abroad, would have us stop the gradual progress we are making, to attend to some Quixotic scheme for making America like "dear Italy." One man thinks music the great desideratum, and would sacrifice every thing to that; another is mad upon the subject of public edifices, and decries every ill-proportioned building as a blot and stain upon the national character, forgetting that our wealth is yet limited, and that we have a great deal to do in other affairs, and that it is quite as important the debit side of the account should bear a fair ratio to the credit side, as that a faultless proportion should exist in the parts of the building. How many public edifices have been enlarged to meet the exigency of the moment and from economy, while taste demands that the whole be pulled down and put up anew.

Go to the western immigrant, who consults convenience and expedition in building his log hut, and is glad of any house that will shelter his little family, and say to him, "there friend, your house is out of all proportion; and where are your fences and your flower-garden? Why don't you paint your gateway, and make gravel walks about your domicil, and set out shrubbery, &c., &c.?" The man will laugh in your face, and perhaps answer you thus: "I have a very warm house; here is a hole in the roof to let out the smoke, and a hole in the door to let in the pigs; it works very well, as you may see." This matter of the pigs might be dispensed with, to be sure, but you would find out that the man is chiefly bent on living first; he feels that he has great fundamental things to attend to before he can accommodate himself to your tastes.

This is our position as a country. We have the land to clear, canals to dig, rail-tracks to lay, water-works to finish; trade, agriculture, and common school education, are the great interests of our people. You may talk to them, write about them, ridicule them, do what you please to divert them from their common-sense track, and you will talk, and write, and ridicule in vain. We cannot do everything to-day. Give us time; and do not expect from our infancy, what only can be found in the manhood of a nation.

II. Advice to Emigrants

A. *Foreign Immigration and the Westward Movement, 1816*[1]

During the period when the Mississippi Valley was being rapidly populated many books on emigration were written, in which those about to migrate to America

[1] *Travels through the United States of America.* By John Melish (Philadelphia and London, 1818), 628–33.

were encouraged to emigrate to the western country and advised as to routes and methods of travel. The same advice was equally good for the native Americans along the coast, for the conditions in the western country were distinctive and peculiar to that section.

It would be very prudent for new comers, especially labourers or farmers, to go into the country without delay, as they will save both money and time by it, and avoid several inconveniences of a seaport town. By spending some time with an American farmer, in any capacity, they will learn the method of tillage, or working a plantation, peculiar to this country. No time can be more usefully employed than a year in this manner. In that space, any smart, stout man can learn how woodland may be cleared, how cleared land is managed; he will acquire some knowledge of crops and their succession, of usages and customs that ought to be known, and perhaps save something into the bargain. Many European emigrants who brought money with them have heretofore taken this wise course, and found it greatly to their advantage; for, at the end of the year, they knew what to do with it. They had learned the value of lands in old settlements and near the frontiers, the price of labour, cattle, and grain, and were ready to begin the world with ardour and confidence. Multitudes of poor people, from Ireland, Scotland, and Germany, have, by these means, together with industry and frugality, become wealthy farmers, or, as they are called in Europe, estated men, who, in their own countries, where all the lands are fully occupied, and the wages of labour low, could never have emerged from the condition wherein they were born.

In the west of Pennsylvania, there is a custom which the farmers there call cropping, and which is as beneficial to the owner as to the tiller of the ground, in the present state of this country. The cropper performs the labour of the plantation, as spring and fall ploughings, sowing, harrowing, or other work, and receives a certain share of the crop, as agreed on, for his pains. But he must be an expert farmer before he can undertake, or be intrusted with, the working of the farm. None but a poor man undertakes it, and that only until he can save money to buy land of his own.

It is invariably the practise of the American, and well suited to his love of independence, to purchase a piece of land as soon as he can, and to cultivate his own farm, rather than live at wages. It is equally in the power of an emigrant to do the same, after a few years of labour and economy. From that moment he secures all the means of happiness. He has a sufficiency of fortune, without being exempt from moderate labour; he feels the comfort of independence, and has no

fear of poverty in his old age. He is invested with the powers as well as the rights of a freeman, and may in all cases, without let or apprehension, exercise them according to his judgment. He can afford to his children a good education, and knows that he has thereby provided for their wants. Prospects open to them far brighter than were his own, and in seeing all this he is surely blest.

Industrious men need never lack employment in America. Labourers, carpenters, masons, bricklayers, stonecutters, blacksmiths, turners, weavers, farmers, curriers, tailors, and shoemakers, and the useful mechanics generally, are always sure of work and wages. Stonecutters now receive, in this city, (New York,) two dollars a day, equal to nine shillings sterling; carpenters, one dollar and eighty-seven and a half cents; bricklayers, two dollars; labourers, from one dollar to one and a quarter; others in proportion. At this time (July, 1816,) house-carpenters, bricklayers, masons, and stonecutters, are paid three dollars per day in Petersburgh, Virginia. The town was totally consumed by fire about a year since, but it is now rising from its ashes in more elegance than ever. Mechanics will find ample employment there for perhaps two years to come. . . .

Men of science, who can apply their knowledge to useful and practical purposes, may be very advantageously settled; but mere literary scholars, who have no profession, or only one which they cannot profitably practise in this country, do not meet with much encouragement; in truth, with little or none, unless they are willing to devote themselves to the education of youth. The demand for persons who will do this is obviously increasing: and although many excellent preceptors are every where to be found among the native Americans, there is still considerable room for competition on the part of well qualified foreigners. . . .

In what part of this extensive country may an emigrant from the northern or western parts of Europe most advantageously settle? If he be undecided until his arrival, his choice will be agreeably perplexed or suspended by the different invitations offered by various sections of this empire. It covers an area between the 31st and 46th degrees of north latitude, and from the Atlantic ocean to the westward indefinitely. In time our settlements will reach the borders of the Pacific. The productions of the soil are as various as the climate. The middle states produce grain of all kinds; Maryland and Virginia afford wheat and tobacco; North Carolina, naval stores; and South Carolina and Georgia, rice, cotton, indigo, and tobacco: to these products, Louisiana and Mississippi add sugar and indigo, which are

now cultivated in Georgia likewise. Tennessee, Kentucky, Indiana and Ohio are productive of the principal part of the foregoing staples, together with hemp, coal, and such plants as are found in the northern and middle states, to the eastward of the Allegany mountains. Over this great tract, the finest fruits grow in perfection; grain of every sort is in plenty; and "he who puts a seed into the earth is recompensed, perhaps, by receiving forty out of it." . . .

If a European has previously resolved to go to the western country, near the Allegany or Ohio rivers, he will have saved much expense and travel by landing at Baltimore; from thence to Pittsburg, at the head of the Ohio, is about 200 miles direct; perhaps not more than 240 by the course of the road. A few days' journey will bring him along a fine turnpike from Baltimore, nearly to Cumberland, in Allegany county, (Md.) from whence the public road, begun by the United States, crosses the mountains, and is to touch the Ohio at Wheeling. A smart fellow, in a little time, will reach Union, in Fayette county, Pennsylvania. Here is a flourishing county adjoining Green, Washington, and Westmoreland, in any one of which may be found almost every thing that is desirable, and a population hospitable and intelligent. From Union to Pittsburg is but a day's journey. There one may ascend the Allegany river to the upper countries; or he may follow the current, and descend the Ohio to the state of that name, cross it to Indiana, or continue his voyage to Kentucky. He may proceed to the Mississippi river, and go up to St. Louis, in the Missouri Territory, or he may proceed a little farther up, and ascend the Illinois River, in the Illinois Territory. Such are the facilities of going by water from Pittsburg to various parts of the west; and those states and territories named are among the most fertile in America.

From Philadelphia to Pittsburg is about 300 miles, chiefly through a fine, plentiful, and well-cultivated country. A gentleman in Pennsylvania, of high standing and information, writes to a member of this society: "Pennsylvania, after all, is, perhaps, the best field for Irish capacity and habits to act in, with prospects for a family, or for individual reward. Lands of the finest quality may be had in this state for barely settling and remaining five years; the advantage derived from the emigrant, being the encouragement of others to settle and purchase." That is by the laws of Pennsylvania, warrantees must make an actual settlement on the lands they claim to hold by deeds from the land-office. Hence, trusty persons obtain a deed for a part, on condition of clearing a certain quantity, and building a house and residing there.

In our state, (of New York,) the advantages are great, whether we regard soil or situation, or roads, lakes, and rivers. Few, if any states in the Union, have finer land than the great western district of New York. It has risen exceedingly in a few years, and the price will be much increased as soon as the intended canal from lakes Erie and Champlain to the Hudson river, shall be completed. These most useful and magnificent works will probably be begun next summer, and afford, for several years to come, to many thousands of industrious poor men an opportunity of enriching themselves. If prudent, they may realize their earnings on the spot, and become proprietors, in fee, of landed estates in the beautiful country they shall have so greatly improved. . . .

Those who have acquired useful trades will, in general, find little difficulty, either in our large cities, or the towns and villages all over the country. There are vacancies for a large portion of them.

Clerks, shopkeepers, or attendants in stores, are seldom wanted; their occupation is an uncertain one; it requires some time, too, for such persons to acquire the mode of doing business with the same expertness as natives or long residents. In most cases a sort of apprenticeship is to be served; and it would be well for persons newly arrived to engage for some months at low wages, with a view to procure the necessary experience. Six months or a year spent in this manner, and for this purpose, will fit a man for making better use of his future years; and he will have no occasion to repent his pains: we would press this on your consideration. . . .

Those who have money, and intend to settle here in any line of business, would do well to vest their funds in some public stock, or deposit them in a bank, until they have acquired such a knowledge of the country, the modes of life and business, as shall enable them to launch into trade, commerce, or manufactures, with safety. To loan money securely, needs great care. It has been often seen that persons arriving in America with some property, lose it before they prosper in the world. The reason of which is that, in the first place, they begin some kind of business without knowing how to conduct it; and, in the next, that, with less skill, they are less frugal and industrious than their competitors. It is equally observable, that persons who arrive here with little to depend on besides their personal exertions, become prosperous at last; for by the time they have earned some money in the employ of others, they will have learned there, likewise, how to secure and improve it.

The delay here recommended is all important and necessary. Nothing can be more ruinous to strangers in this country than head-

long haste in those plans and arrangements on which their future fortune entirely depends. Many a fatal shipwreck has been occasioned by precipitation; and many are they who can from sad experience bear witness to this truth. Knowledge of modes and methods must be acquired before we think of hazarding, or dream of acquiring money. A man ignorant of the use of the sword might as well fight a fencing master with that weapon, as an unexperienced stranger enter the lists in business with those who are adepts in their trade. But in giving admonition, let us not be thought to present discouragements; a little pains and observation will qualify a man of sense to judge, and the example of men here, in this or that occupation, is well worth regarding. The people of this country are cast in a happy medium, at once liberal and cautious, cool in deciding, and ardent in performing; none exceed them in acuteness and discernment, and their conduct is generally a pattern that may be followed with advantage.

B. *Opportunities in the West, 1817*[1]

Naturally the force that drew emigrants westwards was the opportunity to be found there. No one saw these opportunities more clearly than Morris Birkbeck, a prosperous English farmer, who settled in Illinois in 1817.

The great want of capital in this country is evinced by this circumstance: the growers of "corn" (Indian corn) and other grain, sell at this season regularly, under the knowledge that it will as regularly advance to double the price before the next harvest. We now have an offer of two hundred barrels of "corn," five bushels to the barrel, at a dollar per barrel, when the seller is quite aware that it will be worth two dollars per barrel at Midsummer. Thus store-keepers, or other capitalists, receive as much for the crop, clear of expenses, as the grower himself, who clears the land, ploughs, sows, and reaps it. We may judge from this consideration how much the farmer is kept back for want of spare capital; and what will be the advantages of the settler who commands it. The same remark applies to bacon, and every article of produce.

We must not suppose, that the poor farmer who is obliged to sell under such a disadvantage, is absolutely *poor*. He is, on the contrary, a thriving man. Probably, the person who now spares us from his heap, two hundred barrels of corn, possessed three years ago, nothing but his wife and family, his hands, and his title to a farm where an axe

[1] *Notes on a Journey in America from the Coast of Virginia to the Territory of Illinois.* By Morris Birkbeck (London, 1818), 141–4.

had never been lifted. He now, in addition, has a cabin, a barn, stable, horses, cows, and hogs; implements, furniture, grain, and other provisions; thirty or forty acres of cleared land, and more in preparation, and well fenced; and his quarter section in its present state, worth four times its cost. He is growing rich, but he would proceed at a double speed, if he had the value of one year's crop beforehand: such is the general condition of new settlers.

A good cow and calf is worth from twelve to twenty dollars; a two year old heifer, six dollars; sheep are scarce; ewes are worth about three dollars a head; a sow three dollars; a stout horse for drawing, sixty dollars or upwards.

Wheat sells at 3 s. 4½ d. sterling, per bushel, Winchester measure.
Oats, 1 s. 4 d.
Indian corn, 11 d.
Hay, about 35 s. per ton.
Flour, per barrel, 36 s.: 196 lb. nett.
Fowls, 4½ d. each.
Eggs, ½ d.
Butter, 6 d. per pound.
Cheese, rarely seen, 13½ d. per lb.
Meat, 2 d. per lb.
A buck, 4 s. 6 d. without the skin.
Salt, 3 s. 4 d. per bushel.
Milk, given away.
Tobacco, 3 d. per pound.

Our design was to commence housekeeping, but, being near the tavern, we continued to board there. This is more convenient to us, as there is but a poor market in this little town, and the tavern charges are reasonable. Our board is two dollars per week, each person, for which we receive twenty-one meals. Excellent coffee and tea, with broiled chickens, bacon, &c. for breakfast and supper; and variety of good but simple fare at dinner; about five-pence sterling a meal. No liquor but water is thought of at meals in this country, besides coffee, tea, or milk.

Travelling expenses are very regular and moderate, amounting to a dollar per day, for man and horse, — viz.—

Breakfast and feed for horse	37½ cents
Feed for horses at noon	12½ "
Supper, and lodging, man and horse	50 "
	100 that is 1 dollar.

The power of capital in this newly settled or *settling* region, is not thoroughly understood in the eastern states, or emigration would not be confined to the indigent or laborious classes. These seem to be all in motion; for the tide sets far more strongly from these states toward the west, than from all Europe together. Trade follows of course; and it is not surprising that old America no longer affords a sure asylum for the distressed of other countries.

C. *Routes to the West, 1837* [1]

Once the emigrant's mind was made up to move westward, the selection of a route to that section became important. John Mason Peck, a well-known authority on the history and geography of the Mississippi Valley, describes several routes as follows:

Having decided to what State and part of the State, an emigrant will remove, let him then conclude to take as little furniture and other luggage as he can do with, especially if he comes by public conveyances. Those who reside within convenient distance of a sea port, would find it both safe and economical to ship by New Orleans, in boxes, such articles as are not wanted on the road, especially if they steer for the navigable waters of the Mississippi. Bed and other clothing, books, &c., packed in boxes, like merchants' goods, will go much safer and cheaper by New Orleans, than by any of the inland routes. I have received more than one hundred packages and boxes from eastern ports, by that route, within twenty years, and never lost one. Boxes should be marked to the owner or his agent at the river port where destined, and to the charge of some forwarding house in New Orleans. The freight and charges may be paid when the boxes are received.

If a person designs to remove to the north part of Ohio and Indiana, to Chicago and vicinity, or to Michigan, or Green Bay, his course should be by the New York canal, and the lakes. . . .

The same route will carry emigrants to Cleaveland, and by the Ohio canal, to Columbus, or to the Ohio river, at Portsmouth; from whence, by steam-boat, direct communications will offer to any river port in the Western States. From Buffalo, steam-boats run constantly (when the lake is open), to Detroit, stopping at Erie, Ashtabula, Cleaveland, Sandusky and many other ports, from whence stages run to every prominent town. Transportation-wagons are employed in forwarding goods. . . .

[1] *A New Guide for Emigrants to the West.* By J. M. Peck (Boston, 1837), 372–5.

The most expeditious, pleasant and direct route for travelers to the southern parts of Ohio and Indiana; to the Illinois river, as far north as Peoria; to the Upper Mississippi, as far as Quincy, Rock Island, Galena and Prairie du Chien; to Missouri, and to Kentucky, Tennessee, Arkansas, Natchez and New Orleans, is one of the southern routes. These are, — 1. From Philadelphia to Pittsburgh, by rail-roads and the Pennsylvania canal; 2. By the Baltimore and Ohio rail-road and stages, to Wheeling; or, 3. For people living to the south of Washington, by stage, by the way of Charlottesville, (Virginia,) Staunton, the Hot, Warm, and White-Sulphur Springs, Lewisburg, Charlestown, to Guyandotte, from whence a regular line of steam-boats runs three times a week to Cincinnati. Intermediate routes from Washington city to Wheeling, or to Harper's Ferry, to Fredericksburg, and intersect the route through Virginia, at Charlottesville.

D. *Modes of Traveling, 1818*[1]

In addition to pointing out routes to the western country, Mr. Fearon gives immigrants advice as to modes of traveling and to the kinds of equipment to be provided as follows:

Mechanics, intending to continue as such, would do well to remain in New York, Baltimore, or Philadelphia, until they become familiarised with the country. Persons designing to settle in the western States will save some expences by landing in Philadelphia. Those to whom a few pounds is not an object, will shorten their voyage two or three days by arriving at New York. The summer route from thence to Philadelphia is particularly pleasant, with the exception of 25 miles land-carriage, and sleeping one night on the road: the whole can be completed for about ten dollars. In winter, there are excellent stages (by far the best in America) from New York to Philadelphia: the fare is from eight to ten dollars, and the journey is completed in fourteen hours, — distance, 96 miles.

The route to the western country, by way of New Orleans, is attended with many disadvantages: it is much longer, and more dangerous, in consequence of a great deal of coasting, and the difficulties of the gulph of Florida. The voyage from the Balaize, at the junction of the Mississippi with the gulph of Mexico, to New Orleans, though but 100 miles, is always tedious, and sometimes vessels are three weeks in getting up that distance. The yellow fever is of annual occurrence

[1] *Sketches of America.* By Henry Bradshaw Fearon (London, 1819), 452–4.

at New Orleans. The steam-boats, though numerous, do not proceed at stated periods, and a residence at New Orleans may be long, and *must be expensive;* and to engage a passage in a keel-boat *up* the stream, would be an almost endless undertaking.

The best mode, in my judgment, is to proceed from Philadelphia by way of Pittsburgh. Horseback is very preferable to the stage, particularly on the Allegany mountains. A poor family would have their baggage conveyed in the cheapest way by the regular stage-waggons, — themselves walking; and this they will find in crossing the mountains to be better than riding (except on horseback.) They should take with them as good a stock of *eatables* as they can with convenience, the charges on the road being very extravagant. Those who have their own waggons should have them made as strong as possible, and their horses should be in good condition. Small articles of cutlery, and all the machinery necessary for repairs on the road, are of first necessity. When arrived at Pittsburgh, the cheapest and easiest mode of travelling is to float down the river; for which purpose there are boats of almost every variety, (steam-boats excepted,) from 2 s. 3 d. upwards, per hundred miles. Upon this mode of travelling I do not enlarge: half an hour's residence in Pittsburgh will convey more information than I could in twenty pages. Warm clothing should be taken, as there is sure to be some *severe* weather in every part of America. The articles required in floating down the river will be nearly as follows: — The "Pittsburgh Navigator," a small volume, and which may be had at Cramer and Spears; nails, hammer, hatchet, tinder-box, box for fire, gridiron, iron pot, coffee-pot, coffee-mill, tea-pot, plates, spoons, knives and forks, mugs, candles, coffee, tea, sugar, spirits, meat, potatoes, bread, pens and ink, paper, medicine, and a gun. If there is what is called "a good stage of water," that is, if the waters of the Ohio are high, which they always are in the spring and autumn, boats will be taken by the stream, without rowing, from three to four miles per hour. Except in cases of dense fog, they can be allowed to float at night in the Ohio. In the Mississippi this would not be safe, the navigation of the latter river being both difficult and dangerous. Unless the waters of the Ohio are very high at its falls near Louisville, a pilot should be engaged to navigate the boat over them.

III. Moving Westward

A. *Down the Ohio River, 1820*[1]

One of the most used routes to the western country was the Ohio River, for it was an easy matter for the emigrant to buy or build a rude flatboat on which he carried his possessions to his new home in the west. James Hall, the best-known literary man of his time in the Mississippi Valley, describes one of these flatboats as he saw it, as follows:

To-day we passed two large rafts lashed together, by which simple conveyance several families from New England were transporting themselves and their property to the land of promise in the western woods. Each raft was eighty or ninety feet long, with a small house erected on it; and on each was a stack of hay, round which several horses and cows were feeding, while the paraphernalia of a farm-yard, the ploughs, waggons, pigs, children, and poultry, carelessly distributed, gave to the whole more the appearance of a permanent residence, than of a caravan of adventurers seeking a home. . . . In this manner these people travel at a slight expense. They bring their own provisions; their raft floats with the current; and honest Jonathan, surrounded with his scolding, grunting, squalling, and neighing dependents, floats to the *point proposed* without leaving his own fireside; and on his arrival there, may step on shore with his house, and commence business, like a certain grave personage, who, on his marriage with a rich widow, said he had "nothing to do but to walk in and hang up his hat."

B. *Travel by Land, 1817*[2]

Mr. Birkbeck's impressions of the emigrants moving by wagon are as follows:

We have now fairly turned our backs on the old world, and find ourselves in the very stream of emigration. Old America seems to be breaking up, and moving westward. We are seldom out of sight, as we travel on this grand track, towards the Ohio, of family groups, behind and before us, some with a view to a particular spot, close to a brother perhaps, or a friend, who has gone before, and reported well of the country. Many like ourselves, when they arrive in the wilderness, will find no lodge prepared for them.

A small waggon (so light that you may almost carry it, yet strong enough to bear a good load of bedding, utensils and provisions, and a

[1] *Letters from the West.* By The Hon. Judge [James] Hall (London, 1828), 87–8.
[2] *Notes on a Journey in America, etc.* By Morris Birkbeck (London, 1818), 31–3.

swarm of young citizens, — and to sustain marvellous shocks in its passage over these rocky heights) with two small horses; sometimes a cow or two, comprises their all; excepting a little store of hard-earned cash for the land office of the district; where they may obtain a title for as many acres as they possess half-dollars, being one fourth of the purchase money. The waggon has a tilt, or cover, made of a sheet, or perhaps a blanket. The family are seen before, behind, or within the vehicle, according to the road or weather, or perhaps the spirits of the party.

The New Englanders, they say, may be known by the cheerful air of the women advancing in front of the vehicle; the Jersey people by their being fixed steadily within it; whilst the Pennsylvanians creep lingering behind, as though regretting the homes they have left. A cart and single horse frequently afford the means of transfer, sometimes a horse and pack-saddle. Often the back of the poor pilgrim bears all his effects, and his wife follows, naked-footed, bending under the hopes of the family.

C. *Spirit of the Emigrant, 1820*[1]

Emigrants from the thickly settled portions of the Atlantic seaboard no doubt left their old homes for the west with a feeling of mingled joy and sorrow,— sorrow at leaving friends and relatives behind, joy at the prospects in their new home.

No description can convey any adequate idea of the winding paths, the steep acclivities, the overhanging cliffs, and dark ravines, with which these Alpine regions abound — the sublime grandeur of the scenery, or the difficulty and danger of the roads. At the time of which I am speaking, the turnpikes, which have since rendered the passes of the mountains so safe and easy, were not completed; and if I found it toilsome in the extreme to accomplish my journey on horseback, you may conceive the almost insurmountable difficulties presented to weary-laden wanderers, encumbered with waggons and baggage; yet I found these roads crowded with emigrants of every description, but the majority were of the poorest class. Here I would meet a few lusty fellows, trudging it merrily along; and there a family, more embarrassed, and less cheerful: now a gang of forty or fifty souls, men, women, and children; and now a solitary pedestrian, with his oaken staff, his bottle, and his knapsack; and, once a day, a stage-

[1] *Letters from the West.* By The Hon. Judge [James] Hall (London, 1828), 310–14.

load of tired travellers, dragged heavily towards the west. Sometimes I beheld a gentleman toiling along with a broken-down vehicle, and sometimes encountered the solitary horseman: here I espied the wreck of a carriage, or the remains of a meal; and there the temporary shelter which had protected the benighted stranger. At one time, beside a small stream rushing through a narrow glen, I encountered a party of about fourscore persons, with two or three waggons. They had halted to bait; the beasts were grazing among the rocks, the men cleaving wood for fires, and boughs to erect a tenement for the hour; the women cooking or nursing their children, and the rosy boys and girls dabbling in a waterfall. When, from the summit of a mountain, or one of its precipices, where the road wound beneath my feet, appearing at intervals as far as the eye could reach, I beheld one of these large caravans, composed of half-clad beings, of every age and sex, slowly winding up the mountain path, or reclining at mid-day among the rocks, I could compare them only to the gipsy bands, described by foreign novelists.

At one of the most difficult passes of the mountain I met a cavalcade, whose description will apply to a numerous class; they were from New England. The senior of the party was a middle-aged man, hale, well built, and decently clad. He was guiding a pair of small, lean, active horses, harnessed to a light waggon, which contained the bedding, and provisions of the party, and a few articles of household furniture; two well-grown, barefoot boys, in home-spun shirts and trowsers, held the tail of the waggon, laudably endeavouring to prevent an *upset*, by throwing their weight occasionally to that side which seemed to require ballast, while the father exerted his arms, voice, and whip, in urging forward his ponies. In the rear toiled the partner of his pilgrimage, conducting, like John Rodgers' wife, "nine small children and one at the breast," and exhibiting, in her own person and those of her offspring, ample proof, that whatever might be the character of the land to which they were hastening, that which they had left was not deficient in health or fruitfulness. Nor must I omit to mention a chubby boy of six years old, who by sundry falls and immersions, had acquired the hue of the soil from head to foot, and though now trudging knee-deep in the mire, was craunching an apple with the most entire composure. They had reached the summit of the mountain just as I overtook them, and as they halted to rest, I checked my horse to observe them. As they stretched their eyes forward over the interminable prospect, they were wrapped in silent wonder. As far as the vision could extend there was nothing to intercept it; be-

neath our feet lay mountains, and vallies, and forests, and rivers, all of which must be passed before these

"Sad unravellers
Of the mazes to the mountain's top,"

could reach the land of promise, which they imagined they could now dimly discern in the distant horizon. They looked back with a kind of shuddering triumph at what they had accomplished; they looked forward with a trembling hope at what was to come. I thought I could see in their faces regret, hope, fear, resignation — but they spoke cheerfully, and expressed no dissatisfaction; and after answering their inquiries as to their route onward, I left them. Tired souls! they have, probably, long ere this, surmounted their fatigues, and found a happy home in a land of plenty, where, surrounded with fat pigs and fat children, they enjoy the only true *otium cum dignitate;* while I, delving among the labyrinths of the *law*, find mazes more intricate, and steeps more arduous, than the winding paths of the mountain.

D. *On the National Road, 1840*[1]

The most important land route from the east to the west was the National Road. This road was built by the National Government as far westward as Vandalia, Illinois. An English traveler, J. S. Buckingham, describes a scene on this road as follows:

On the road we overtook and passed a great number of waggons, perhaps 50, in the course of the day, containing emigrant families going still further West — to Indiana and Illinois, where land may still be had at one dollar and a quarter per acre. It is therefore worth while for them to make long journeys, and hoard up their resources, to put themselves in possession of an estate large enough for the whole family, if they will only go far west enough to get it at a cheap price. Of these emigrant families, there were often 12 or 15 persons in each, many of them very young children; a covered waggon, drawn sometimes by two horses, though frequently by one only, contained all the household furniture, and provisions for the way; and the women and young children were piled upon these. The men and the elder boys walked beside the wagon — and they made a journey of from 12 to 15 miles a day. During the way they would halt at any favourable spot that presented itself, unharness the horse,

[1] *Eastern and Western States of America.* By J. S. Buckingham (London, [1842]), II, 290–3.

and let it loose to graze in the woods, while the parents and children would get their utensils for preparing a meal, or be engaged in washing, drying, and mending their clothes by the wayside. . . .

Among the indications of this being the high road for emigrants to the west, we saw several houses by the road-side, expressly for their use, with the signs "Moovers' Accommodation,"— others with more correct orthography, had "House for Movers,"— and a third had the rather ambiguous words, "Movers taken in here." At the same time, while the movers were going onward, settlers were clearing and planting all along the edge of the road. We saw perhaps 100 log-cabins in our day's ride,— some not a week old, and others in the act of putting up.

IV. Frontier Classes of Population

The Restlessness of the Frontiersman, 1837[1]

The westward movement was in reality a series of movements. Those who went first performed their tasks and then made way for the next wave, which was in turn succeeded by the third. A careful observer has described this movement as follows:

The rough, sturdy habits of the backwoodsmen, living in that plenty which depends on God and nature, have laid the foundation of independent thought and feeling deep in the minds of western people.

Generally, in all the western settlements, three classes, like the waves of the ocean, have rolled one after the other. First, comes the pioneer, who depends for the subsistence of his family chiefly upon the natural growth of vegetation, called the "range," and the proceeds of hunting. His implements of agriculture are rude, chiefly of his own make, and his efforts directed mainly to a crop of corn, and a "truck patch." The last is a rude garden for growing cabbage, beans, corn for roasting ears, cucumbers and potatoes. A log cabin, and, occasionally, a stable and corn-crib, and a field of a dozen acres, the timber girdled or "deadened," and fenced, are enough for his occupancy. It is quite immaterial whether he ever becomes the owner of the soil. He is the occupant for the time being, pays no rent, and feels as independent as the "lord of the manor." With a horse, cow, and one or two breeders of swine, he strikes into the woods with his family, and becomes the founder of a new county, or perhaps State. He builds his cabin, gathers around him a few other

[1] *A New Guide for Emigrants to the West.* By J. M. Peck (Boston, 1837), 119–21.

families of similar taste and habits, and occupies till the range is somewhat subdued, and hunting a little precarious, or, which is more frequently the case, till neighbors crowd around, roads, bridges and fields annoy him, and he lacks elbow room. The preëmption law enables him to dispose of his cabin and corn-field, to the next class of emigrants, and, to employ his own figures, he "breaks for the high timber," "clears out for the New Purchase," or migrates to Arkansas, or Texas, to work the same process over.

The next class of emigrants purchase the lands, add field to field, clear out the roads, throw rough bridges over the streams, put up hewn log houses, with glass windows, and brick or stone chimneys, occasionally plant orchards, build mills, school-houses, court-houses, &c., and exhibit the picture and forms of plain, frugal, civilized life.

Another wave rolls on. The men of capital and enterprise come. The "settler" is ready to sell out, and take the advantage of the rise of property,— push farther into the interior, and become himself, a man of capital and enterprise in turn. The small village rises to a spacious town or city; substantial edifices of brick, extensive fields, orchards, gardens, colleges and churches are seen. Broadcloths, silks, leghorns, crapes, and all the refinements, luxuries, elegancies, frivolities and fashions, are in vogue. Thus wave after wave is rolling westward:— the real *el dorado* is still farther on.

A portion of the two first classes remain stationary amidst the general movement, improve their habits and condition, and rise in the scale of society.

V. Activities of the Western Country

Manufactures and Agriculture, 1832 [1]

The differences in climate and soil of the western country gave the opportunity there for a wide field of activities. By far the greater number of the people was engaged in agriculture, but here and there manufactures on a small scale were being put under way. Timothy Flint has described these activities as follows:

. . . Western Pennsylvania is a manufacturing region, and along with Ohio, is the New England of the West. The people bring down the Alleghany, clear and fine pine plank; delivering them along the whole course of the Ohio, and sending great quantities even to New Orleans. These pines, of which the houses in New Orleans are finished, waved over the streams of New York, and are despatched in

[1] *The History and Geography of the Mississippi Valley.* By Timothy Flint (Cincinnati, 1832), I, 147–50.

rafts and flat boats, after being sawed into plank, from Oleanne point. From the Monongahela is sent the rye whiskey, which is so famous in the lower country. On the Youghiogheny and Monongahela, at Connelsville on the former, and Brownsville on the latter, are important manufactories, chiefly of iron. Pittsburgh has been called the Birmingham of America; though that honor, is keenly disputed by her rival Cincinnati. There are numerous manufacturing towns in Ohio, of which, after Cincinnati, Zanesville and Steubenville are the chief. All this region, in numerous streams, calculated for water power, in a salubrious climate, in abundance of pit coal, in its position, and the genius and habits of its inhabitants, is naturally adapted to become a manufacturing country. Materials for articles of prime necessity, as salt, iron and glass, exist in the most ample abundance. Pittsburgh, blackened with the smoke of pit coal, and one quarter of Cincinnati, throwing up columns of smoke from the steam factories, may be considered as great manufacturing establishments. If we except the cordage, bale rope, bagging, and other articles of hempen fabric, manufactured in Kentucky, the chief part of the western manufactures originates in west Pennsylvania and Ohio. There are some indications, that Indiana will possess a manufacturing spirit; and there are separate, incipient establishments of this kind, more or less considerable, in every state, but Louisiana and Mississippi.

These manufactures consist of a great variety of articles of prime necessity, use and ornament. The principal are of iron, as castings of all sorts; and almost every article of ironmongery, that is manufactured in the world. This manufacture is carried on to an immense extent.

Glass is manufactured in various places, at present, it is supposed, nearly to an amount, to supply the country. Manufactures in woolen and cotton, in pottery, in laboratories, as white and red lead, Prussian blue, and the colors generally, the acids and other chemical preparations, in steam power machinery, saddlery, wheel irons, wire drawing, buttons, knitting needles, silver plating, Morocco leather, articles in brass and copper, hats, boots and shoes, breweries, tin, and other metals, cabinet work; in short, manufactures subservient to the arts, and to domestic subsistence, are carried on at various places in the western country with great spirit. Ohio has imbibed from her prototype, New England, manufacturing propensities; and we have heard it earnestly contested, that her capabilities for being a great manufacturing country, were even superior to those of New England. It is affirmed, that, taking the whole year into consideration, her

climate is more favorable to health, and there can be no question, that in her abundance of fuel, pit coal, and iron and the greater profusion of the raw material of manufactures in general, she has greatly the advantage.

In the state of Kentucky, hemp is raised to a considerable extent; and in its different manufactures constitutes a material article in her exports. Salt is manufactured through all the western country in sufficient abundance for home consumption. Shoes, hats and clothing, to a considerable extent, are yet imported from abroad into some of the western states. But as we have remarked, the far greater part of the people are farmers. In west Pennsylvania and Virginia, in Ohio and Kentucky, in Indiana, Illinois, Missouri, and a part of Tennessee, the same articles are grown, and sent abroad, to wit, flour, corn and the small grains; pulse, potatoes, and the other vegetables; fruit, as apples, fresh and dried, dried peaches, and other preserved fruits; beef, pork, cheese, butter, poultry, venison hams, live cattle, hogs and horses. The greater part of the flour is sent from Ohio and Kentucky; though Indiana, Illinois and Missouri are following the example with great vigor. Wheat is grown with more ease in Illinois and Missouri than in the other states. Ohio has gone considerably into the culture of yellow tobacco.— Tobacco is one of the staples of Kentucky export. Cattle, hogs and horses are sent to New Orleans extensively from Illinois and Missouri, as are, also, lead and peltries. In Arkansas, part of Tennessee, all Alabama and Mississippi, cotton is the chief object of cultivation. Grains, and other materials of nutriment, are only raised in subservience to this culture. The cultivation of Louisiana, and a part of Florida, is divided between cotton and sugar.

The cultivation in all the states, except Ohio, Indiana and Illinois is chiefly performed by slaves, of whose character, habits and condition we have yet to treat. The farms in Ohio and Indiana are generally of moderate size, and the cultivators do not materially differ in their habits from those of the northern Atlantic states. In Kentucky, Illinois and Missouri, they are more addicted to what is called 'cropping,' that is, devoting the chief attention to the cultivation of one article. In all the states, save those, that cultivate cotton and sugar, they make, on an average, sixty bushels of maize to the acre: and the cultivation consists in ploughing two or three times between the rows, during the growing of the crop. From eighty to an hundred bushels are not an uncommon crop, and manuring is scarcely yet thought of in cultivation. The good lands in Illinois and in Missouri yield from

twenty five to thirty bushels of wheat to the acre. The cultivation is on prairie, or bottom land; and as the soil is friable, loose and perfectly free from stones, and on the prairies from every other obstruction, farming is not laborious and difficult, as in hard rough, and rocky grounds. The ease and abundance, with which all the articles of the country are produced, is one of the chief objects of complaint. The necessary result is, that they are raised in such abundance, as to glut the market at New Orleans, and used often not to bring enough to pay the expenses of transportation. All this has been recently so changed by the effects of our canals, the rapid influx of immigration, and the levelling tendency of the increased facilities of transport, that the price of western produce is fast approximating the Atlantic value. A natural result of this order of things will be, that the west will soon export four times its former amount of flour, and other produce.

From the cheapness of corn, and the abundance of 'mast,' as it is called, in the woods, hogs, too, are easily multiplied, far beyond the wants of the people. Pork is becoming one of the great staples of all the western states, except those, that grow cotton and sugar. Cincinnati is decidedly the largest pork market in the United States. Prodigious numbers of swine are slaughtered there, and the business of barrelling it, and curing bacon for exportation is one of the most important sources of its trade. Cattle, and swine when carried to New Orleans command a fair price. Horses are an important and increasing article of export. Orchards north of 36° prosper, perhaps, better than in any other country; and apples and cider are already important articles of exportation, and will soon be more so; for no where do apple trees grow with more rapidity and beauty, and sooner and more amply load themselves with fruit. Venison and deer skins, honey and beeswax are commonly received in the country stores, in pay for goods. From Missouri, peltries, furs and lead, from the Illinois mines, and from those in the Missouri mine region, are the chief articles of present export.

VI. In the New Country

A. *Locating and Building a Home, 1832* [1]

Once in his new home, the settler was compelled to adapt himself to his new surroundings. He took the first means at hand to construct his house and barn. In this work he was assisted by his neighbors, who rendered service to every

[1] *The History and Geography of the Mississippi Valley.* By Timothy Flint (Cincinnati, 1832), I, 184–7, 190–2.

new comer and expected similar service in turn. The homes varied according to the locality and to the wealth of the owners, but in general they were of one type. Timothy Flint had many opportunities of seeing the emigrant in his new home, and describes his activities in making a home as follows:

The chances are still more favorable for the immigrants from Virginia, the two Carolinas and Georgia, who, from their habits and relative position, still immigrate, after the ancient fashion, in the southern wagon. This is a vehicle almost unknown at the north, strong, comfortable, commodious, containing not only a movable kitchen, but provisions and beds. Drawn by four or six horses, it subserves all the various intentions of house, shelter and transport; and is, in fact, the southern ship of the forests and prairies. The horses, that convey the wagon, are large and powerful animals, followed by servants, cattle, sheep, swine, dogs, the whole forming a primitive caravan not unworthy of ancient days, and the plains of Mamre. The procession moves on with power in its dust, putting to shame and uncomfortable feelings of comparison the northern family with their slight wagons, jaded horses and subdued, though jealous countenances. Their vehicle stops; and they scan the strong southern hulk, with its chimes of bells, its fat black drivers and its long train of concomitants, until they have swept by.

Perhaps more than half the northern immigrants arrive at present by way of the New York canal and lake Erie. If their destination be the upper waters of the Wabash, they debark at Sandusky, and continue their route without approaching the Ohio. The greater number make their way from the lake to the Ohio, either by the Erie and Ohio, or the Dayton canal. From all points, except those west of the Guyandot route and the national road, when they arrive at the Ohio, or its navigable waters, the greater number of the families 'take water.' Emigrants from Pennsylvania will henceforward reach the Ohio on the great Pennsylvania canal, and will 'take water' at Pittsburgh. If bound to Indiana, Illinois or Missouri, they build, or purchase a family boat. Many of these boats are comfortably fitted up, and are neither inconvenient, nor unpleasant floating houses. Two or three families sometimes fit up a large boat in partnership, purchase an 'Ohio pilot,' a book that professes to instruct them in the mysteries of navigating the Ohio; and if the Ohio be moderately high, and the weather pleasant, this voyage, unattended with either difficulty or danger, is ordinarily a trip of pleasure. We need hardly add, that a great number of the wealthier emigrant families take passage in a steam boat.

While the southerner finds the autumnal and vernal season on the Ohio too cool, to the northerner it is temperate and delightful. When the first wreaths of morning mist are rolled away from the stream by the bright sun, disclosing the ancient woods, the hoary bluffs, and the graceful curves and windings of the long line of channel above and below, the rich alluvial belt and the fine orchards on its shores, the descending voyagers must be destitute of the common perceptions of the beautiful, if they do not enjoy the voyage, and find the Ohio, in the French phrase, La belle riviere.

After the immigrants have arrived at Cincinnati, Lexington, Nashville, St. Louis, or St. Charles, in the vicinity of the points, where they had anticipated to fix themselves, a preliminary difficulty, and one of difficult solution is, to determine to what quarter to repair. All the towns swarm with speculating companies and land agents; and the chance is, that the first inquiries for information in this perplexity will be addressed to them, or to persons who have a common understanding and interest with them. The published information, too, comes directly or indirectly from them, in furtherance of their views. One advises to the Wabash, and points on the map to the rich lands, fine mill seats, navigable streams and growing towns in their vicinity. Another presents a still more alluring picture of the lands in some part of Illinois, Missouri, the region west of the lakes, and the lead mines. Another tempts him with White River, Arkansas, Red River, Opelousas, and Attakapas, the rich crops of cotton and sugar, and the escape from winter, which they offer. Still another company has its nets set in all the points, where immigrants congregate, blazoning all the advantages of Texas, and the Mexican country. In Cincinnati, more than in any other town, there are generally precursors from all points of the compass, to select lands for companies, that are to follow. There are such here at present both from Europe and New England; and we read advertisements, that a thousand persons are shortly to meet at St. Louis to form a company to cross the Rocky Mountains, with a view to select settlements on the Oregon.

When this slow and perplexing process of balancing, comparing and fluctuating between the choice of rivers, districts, climates and advantages, is fixed, after determination has vibrated backwards and forwards according to the persuasion and eloquence of the last adviser, until the purpose of the immigrant is fixed, the northern settler is generally borne to the point of debarkation, nearest his selected spot, by water. He thence hires the transport of his family and movables

to the spot; though not a few northern emigrants move all the distance in wagons. The whole number from the north far exceeds that from the south. But they drop, in noiseless quietness, into their position, and the rapidity of their progress in settling a country is only presented by the startling results of the census.

The southern settlers who immigrate to Missouri and the country south west of the Mississippi, by their show of wagons, flocks and numbers create observation, and are counted quite as numerous, as they are. Ten wagons are often seen in company. It is a fair allowance, that a hundred cattle, beside swine, horses and sheep, and six negroes accompany each. The train, with the tinkling of an hundred bells, and the negroes, wearing the delighted expression of a holiday suspension from labor in their countenances, forming one group, and the family slowly moving forward, forming another, as the whole is seen advancing along the plains, it presents a pleasing and picturesque spectacle.

They make arrangements at night fall to halt at a spring, where there is wood and water, and a green sward for encampment. The dogs raise their accustomed domestic baying. The teams are unharnessed, and the cattle and horses turned loose into the grass. The blacks are busy in spreading the cheerful table in the wilderness, and preparing the supper, to which the appetite of fatigue gives zest. They talk over the incidents of the past day, and anticipate those of the morrow. If wolves and owls are heard in the distance, these desert sounds serve to render the contrast of their society and security more sensible. In this order they plunge deeper and deeper into the forest or prairie, until they have found the place of their rest.

The position for a cabin generally selected by the western settlers is a gentle eminence near a spring, or what is called a *branch*, central to a spacious tract of fertile land. Such spots are generally occupied by tulip and black walnut trees, intermixed with the beautiful *cornus florida* and *red bud*, the most striking flowering shrubs of the western forest.

Springs burst forth in the intervals between the high and low grounds. The brilliant red bird seen flitting among the shrubs, or perched on a tree, in its mellow whistle seems welcoming the immigrant to his new abode. Flocks of paroquets are glittering among the trees, and gray squirrels are skipping from branch to branch. The chanticleer rings his echoing note among the woods, and the domestic sounds and the baying of the dogs produce a strange cheerfulness, as heard in the midst of trees, where no habitation is seen. Pleasing reflections

and happy associations are naturally connected with the contemplation of these beginnings of social toil in the wilderness.

In the midst of these solitary and primeval scenes the patient and laborious father fixes his family. In a few days a comfortable cabin and other out buildings are erected. The first year gives a plentiful crop of corn, and common and sweet potatoes, melons, squashes, turnips and other garden vegetables. The next year a field of wheat is added, and lines of thrifty apple trees show among the deadened trees. If the immigrant possess any touch of horticultural taste, the finer kinds of pear, plum, cherry, peach, nectarine and apricot trees are found in the garden. In ten years the log buildings will all have disappeared, the shrub and forest trees will be gone. The arcadian aspect of humble and retired abundance and comfort will have given place to a brick house, or a planted frame house, with fences and out buildings very like those, that surround abodes in the olden countries. . . .

The first business is to clear away the trees from the spot where the house is to stand. The general construction of a west country cabin is after the following fashion. Straight trees are felled of a size, that a common team can draw, or as the phrase is 'snake,' them to the intended spot. The common form of a larger cabin is that, called a 'double cabin;' that is, two square pens with an open space between, connected by a roof above and a floor below, so as to form a parallelogram of nearly triple the length of its depth. In the open space the family take their meals during the pleasant weather; and it serves the threefold purpose of kitchen, lumber room, and dining room. The logs, of which it is composed, are notched on to one another, in the form of a square. The roof is covered with thin splits of oak, not unlike staves. Sometimes they are made of ash, and in the lower country of cypress, and they are called clap boards. Instead of being nailed, they are generally confined in their place by heavy timbers, laid at right angles across them. This gives the roof of a log house an unique and shaggy appearance. But if the clap boards have been carefully prepared from good timber they form a roof sufficiently impervious to common rains. The floors are made from short and thick plank, split from yellow poplar, cotton wood, black walnut, and sometimes oak. They are confined with wooden pins, and are technically called 'puncheons.'

The southern people, and generally the more wealthy immigrants advance in the first instance to the luxury of having the logs hewed on the inside, and the puncheon floor hewed, and planed, in which case it becomes a very comfortable and neat floor. The next step is to

build the chimney, which is constructed after the French, or American fashion. The French mode is a smaller quadrangular chimney, laid up with smaller splits. The American fashion is to make a much larger aperture, laid up with splits of great size and weight. In both forms it tapers upwards, like a pyramid. The interstices are filled with a thick coating of clay, and the outside plastered with clay mortar, prepared with chopped straw, or hay, and in the lower country with long moss. The hearth is made with clay mortar, or, where it can be found, sand stones, as the common lime stone does not stand the fire. The interstices of the logs in the room are first 'chincked;' that is to say, small blocks and pieces of wood in regular forms are driven between the intervals, made by laying the logs over each other, so as to form a kind of a coarse lathing to hold the mortar.

The doors are made of plank, split in the manner mentioned before, from fresh cut timber; and they are hung after an ingenious fashion on large wooden hinges, and fastened with a substantial wooden latch. The windows are square apertures, cut through the logs, and are closed during the cooler nights and the inclement weather by wooden shutters. The kitchen and the negro quarters, if the establishment have slaves, are separate buildings, prepared after the same fashion; but with less care, except in the article of the closeness of their roofs. The grange, stable and corn houses are all of similar materials, varied in their construction to answer their appropriate purposes. About ten buildings of this sort make up the establishment of a farmer with three or four free hands, or half a dozen slaves.

The field, in which the cabin is built, is generally a square or oblong enclosure, of which the buildings are the centre, if the owner be from the south; or in the centre of one side of the square, if from the north. If the soil be not alluvial, a table area of rich upland, indicated to be such by its peculiar growth of timber, is selected for the spot. Nine tenths of the habitations in the upper western states are placed near springs, which supply the family with water. The settlers on the prairies, for the most part, fix their habitations in the edges of the wood, that skirts the prairie, and generally obtain their water from wells. The inhabitants of the lower country, on the contrary, except in the state of Mississippi, where springs are common, chiefly supply themselves with water from cisterns filled by rain. If the settlers have slaves, the trees are carefully cleared away, by cutting them down near the ground. That part of the timber, which cannot be used either for rails, or the construction of the buildings, is burned, and a clearing is thus made for a considerable space round the cabin. In the remain-

ing portion of the field, the trees undergo an operation, called by the northern people 'girdling,' and by the southern 'deadening.' That is, a circle is cut, two or three feet from the ground, quite through the bark of the tree, so as completely to divide the vessels, which carry on the progress of circulation. Some species of trees are so tenacious of life, as to throw out leaves, after having suffered this operation. But they seldom have foliage, after the first year. The smaller trees are all cut down; and the accumulated spoils of vegetable decay are burned together; and the ashes contribute to the great fertility of the virgin soil. If the field contain timber for rails, the object is to cut as much as possible on the clearing; thus advancing the double purpose of clearing away the trees, and preparing the rails, so as to require the least possible distance of removal. An experienced hand will split from an hundred to an hundred and fifty rails in a day. Such is the convenience of finding them on the ground to be fenced, that Kentucky planters and the southern people generally prefer timbered land to prairie; notwithstanding the circumstance, so unsightly and inconvenient to a northern man, of dead trees, stumps, and roots, which, strewed in every direction over his field, even the southern planter finds a great preliminary impediment in the way of cultivation. The northern people prefer to settle on the prairie land, where it can be had in convenient positions.

The rails are laid zigzag, one length running nearly at right angles to the other. This in west country phrase, is 'worm fence,' and in the northern dialect 'Virginia fence.' The rails are large and heavy, and to turn the wild cattle and horses of the country, require to be laid ten rails or six feet in height. The smaller roots and the underbrush are cleared from the ground by a sharp hoe, known by the name '*grubbing hoe*.' This implement, with a *cross cut saw*, *a whip saw*, *a hand saw*, *axes*, *a broad axe*, *an adze*, *an augur*, *a hammer*, *nails*, and an iron tool to split clap boards, constitute the indispensable apparatus for a backwoodsman. The smoke house, spring house, and other common appendages of such an establishment, it is unnecessary to describe; for they are the same as in the establishment of the farmers in the middle and southern Atlantic states.

B. *Effect of the New Home on the Character of the Emigrant, 1832* [1]

While the frontier offered undreamed of advantages to the settler, it at the same time tested his courage by imposing on him hardships unknown in his old home. To secure the one it was necessary to undergo the other. Moreover,

[1] *The History and Geography of the Mississippi Valley*. By Timothy Flint (Cincinnati, 1832), I, 187–90.

as each settler recalled the excellencies of his old associations, and compared them with a feeling of regret to the limitations of the frontier he experienced a home sickness which too often forced him back to his old home in the east, thus robbing him of the opportunities that lay all around him.

It is a wise arrangement of providence, that different minds are endowed with different tastes and predilections, that lead some to choose the town, others manufactures, and the village callings. It seems to us that no condition, in itself considered, promises more comfort, and tends more to virtue and independence, than that of these western yeomen, with their numerous, healthy and happy children about them; with the ample abundance of their granaries; their habitation surrounded by orchards, the branches of which must be propped to sustain their fruit, beside their beautiful streams and cool beach woods, and the prospect of settling each of their children on similar farms directly around them. Their manners may have something of the roughness imparted by living in solitude among the trees; but it is kindly, hospitable, frank, and associated with the traits, that constitute the stability of our republic. We apprehend, such farmers would hardly be willing to exchange this plenty, and this range of their simple domains, their well filled granaries, and their droves of domestic animals for any mode of life, that a town can offer.

No order of things presents so palpable a view of the onward march of American institutions as this. The greater portion of these immigrants, beside their wives, a few benches and chairs, a bible and a gun, commenced with little more than their hands. Their education for the most part, extended no farther than reading and writing, and their aspirations had never strayed beyond the desire of making a farm. But a sense of relative consequence is fostered by their growing possessions, and by perceiving towns, counties, offices and candidates springing up around them. One becomes a justice of peace, another a county judge and another a m mber of the legislative assembly. Each one assumes some municipal function, pertaining to schools, the settlement of a minister, the making of roads, bridges, and public works. A sense of responsibility to public opinion, self respect, and a due estimation of character and correct deportment are the consequences.

This pleasant view of the commencement and progress of an immigrant is the external one. Unhappily there is another point of view, from which we may learn something what has been passing in his mind, during this physical onward progress.

All the members of the establishment have been a hundred times afflicted with that gloomy train of feeling, for which we have no better

name, than home sickness. All the vivid perceptions of enjoyment of the forsaken place are keenly remembered, the sorrows overlooked, or forgotten. The distant birth place, the remembrance of years, that are gone, returning to memory amidst the actual struggles of forming a new establishment, an effort full of severe labor, living in a new world, making acquaintance with a new nature, competing with strangers, always seeming to uneducated people, as they did to the ancients, as enemies, these contrasts of the present with the mellowed visions of memory all tend to bitterness. We never understand, how many invisible ties of habit we sever in leaving our country, until we find ourselves in a strange land. The old pursuits, and ways of passing time, of which we took little note, as they passed, where there are new forms of society, new institutions, new ways of managing every thing, that belongs to the social edifice, in a word, a complete change of the whole circle of associations feelings and habits, come over the mind, like a cloud.

The immigrant, in the pride of his remembrances, begins to extol the country, he has left, its inhabitants, laws, institutions. The listener has an equal stock of opposite prejudices. The pride of the one wounds the pride of the other. The weakness of human nature is never more obvious, than in these meetings of neighbors in a new country, each fierce and loud in extolling his own country, and detracting from all others in the comparison. These narrow and vile prejudices spread from family to family, and create little clans political, social, religious, hating, and hated. No generous project for a school, church, library, or public institution, on a broad and equal scale, can prosper, amidst such an order of things. It is a sufficient reason, that one clan proposes it, for another to oppose it. All this springs from one of the deepest instincts of our nature, a love of country, which, like a transplanted tree, in removing has too many fibres broken off, to flourish at once in a new soil. The immigrant meets with sickness, misfortune, disaster. There are peculiar strings in the constitution of human nature, which incline him to repine, and imagine, that the same things would not have befallen him in his former abode. He even finds the vegetables, fruits, and meats, though apparently finer, less savory and nutritive, than those of the old country. Under the pressure of such illusions, many an immigrant has forsaken his cabin, returned to his parent country, found this mockery of his fancies playing at cross purposes with him, and showing him an abandoned paradise in the western woods, and father land the country of penury and disaster. A second removal, perhaps, instructs him, that most of the

causes of our dissatisfaction and disgust, that we imagine have their origin in external things, really exist in the mind.

To the emigrants from towns and villages in the Atlantic country, though they may have thought little of religious institutions at home, the absence of the church with its spire, and its sounds of the church-going bell, of the village bustle, and the prating of the village tavern are felt, as serious privations. The religious discourses so boisterous and vehement, and in a tone and phrase so different from the calm tenor of what he used to hear, at first produce a painful revulsion not wholly unmixed with disgust. He finds no longer those little circles of company, into which he used to drop, to relax a leisure hour, which, it may be, were not much prized in the enjoyment; but are now felt, as a serious want. Nothing shocks him so much, as to see his neighbor sicken, and die, unsolaced by the voice of religious instruction and prayer, and carried to his long home without funeral services. These are some of the circumstances, that, in the new settlements, call up the tender recollections of a forsaken home to embitter the present.

VII. Stages of Settlement

The Frontier Line, 1830, 1840, 1850, 1860[1]

The extent of the westward movement may be measured with approximate exactness by comparing the position of the frontier line from decade to decade.

1830

In the decade from 1820 to 1830 other territorial changes have occurred. In the early part of the decade the final transfer of Florida from Spanish jurisdiction was effected, and it became a territory of the United States. Missouri has been carved from the southeastern part of the old Missouri territory, and admitted as a state. Otherwise the states and territories have remained nearly as before. Settlement during the decade has again spread greatly. The westward extension of the frontier does not appear to have been so great as in some former periods, the energies of the people being mainly given to filling up the included areas. In other words, the decade from 1810 to 1820 seems to have been one rather of blocking out work which the succeeding decade has been largely occupied in completing.

During this period the Indians, especially in the south, have still

[1] *Tenth Census.* Volume on Population (Washington, 1883), pp. xvi–xviii.

delayed settlement to a great extent. The Creeks and the Cherokees in Georgia and Alabama, and the Choctaws and the Chickasaws in Mississippi, occupy large areas of the best portions of those states, and successfully resist encroachment upon their territory. Georgia, however, has witnessed a large increase in settlement during the decade. The settlements which have heretofore been staid on the line of the Altamaha spread westward across the central portion of the state to its western boundary, where they have struck against the barrier of the Creek territory. Stopped at this point, they have moved southward down into the southwest corner, and over into Florida, extending even to the Gulf coast. Westward they have stretched across the southern part of Alabama, and joined that body of settlement which was previously formed in the drainage-basin of the Mobile river. The Louisiana settlements have but slightly increased, and no great change appears to have taken place in Mississippi, owing largely to the cause above noted, viz., the occupancy of the soil by Indians. In Arkansas the spread of settlement has been in a strange and fragmentary way. A line reaches from Louisiana up the Arkansas river to the state line, where it is stopped abruptly by the boundary of the Indian territory. It extends up the Mississippi, and joins the great body of population in Tennessee. A branch extends northeastward from near Little Rock to the northern portion of the state. All these settlements within Arkansas territory are as yet very sparse. In Missouri the principal extension of settlement has been in a broad belt up the Missouri river, reaching to the present site of Kansas City, at the mouth of the Kansas river, where quite a dense body of population appears. Settlement has progressed in Illinois, from the Mississippi river eastward and northward, covering more than half the state. In Indiana it has followed up the Wabash river, and thence has spread until it reaches nearly to the north line of the state. But little of Ohio remains unsettled. The sparse settlements about Detroit, in Michigan territory, have broadened out, extending into the interior of the state, while isolated patches have appeared in various other localities.

Turning to the more densely settled parts of the country, we find that settlement is slowly making its way northward in Maine, although discouraged by the poverty of the soil and the severity of the climate. The unsettled tract in northern New York is decreasing, but very slowly, as is also the case with the unsettled area in northern Pennsylvania. In western Virginia the unsettled tracts are reduced to almost nothing, while the vacant region in eastern Tennessee, on the Cumberland plateau, is rapidly diminishing.

At this date, 1830, the frontier line has a length of 5,300 miles, and the aggregate area now embraced between the ocean, the Gulf, and the frontier line is 725,406 square miles. Of this, however, not less than 97,389 square miles are comprised within the included vacant tracts, leaving only 628,017 square miles as the settled area within the frontier line, all of which lies between latitude 29° 15′ and 46° 15′ north, and between longitude 67° and 95° west.

Outside the body of continuous settlement are no longer found large groups, but several small patches of population appear in Ohio, Indiana, Illinois, Michigan, and Wisconsin, aggregating 4,700 square miles, making a total settled area, in 1830, of 632,717 square miles. As the aggregate population is 12,866,020, the average density of settlement is 20.3 to the square mile.

1840

During the decade ending in 1840 the state of Michigan has been created with its present limits, the remainder of the old territory being known as Wisconsin territory. Iowa territory has been created from a portion of Missouri territory, embracing the present state of Iowa and the western part of Minnesota, and Arkansas has been admitted to the Union.

In 1840 we find, by examining the map of population, that the process of filling up and completing the work blocked out between 1810 and 1820 has been carried still further. From Georgia, Alabama, and Mississippi the Cherokee, Creek, Choctaw, and Chickasaw Indians, who, at the time of the previous census, occupied large areas in these states, and formed a very serious obstacle to settlement, have been removed to the Indian territory, and their country has been opened up to settlement. Within the two or three years which have elapsed since the removal of these Indians the lands relinquished by them have been entirely taken up, and the country has been covered with a comparatively dense settlement. In northern Illinois, the Sac and Fox and Pottawatomie tribes having been removed to the Indian territory, their country has been promptly taken up, and we find now settlements carried over the whole extent of Indiana, Illinois, and across Michigan and Wisconsin as far north as the 43d parallel. Population has crossed the Mississippi river into Iowa territory, and occupies a broad belt up and down that stream. In Missouri the settlements have spread northward from the Missouri river nearly to the boundary of the state, and southward till they cover most of the southern portion, and make connection in two places with

the settlements of Arkansas. The unsettled area found in southern Missouri, together with that in northwestern Arkansas, is due to the hilly and rugged nature of the country, and to the poverty of the soil, as compared with the rich prairie lands all around. In Arkansas the settlements remain sparse, and have spread widely away from the streams, covering much of the prairie parts of the state. There is, beside the area in northwestern Arkansas just mentioned, a large area in the northeastern part of the state, comprised almost entirely within the alluvial regions of the St. Francis river, and also one in the southern portion, extending over into northern Louisiana, which is entirely in the fertile prairie section. The fourth unsettled region lies in the southwest part of the state.

In the older states we note a gradual decrease in the unsettled areas, as in Maine and in New York. In northern Pennsylvania the unsettled section has entirely disappeared. A small portion of the unsettled patch on the Cumberland plateau still remains. In southern Georgia the Okeefenokee swamp and the pine barrens adjacent have thus far repelled settlement, although population has increased in Florida, passing entirely around this area to the south. The greater part of Florida, however, including nearly all the peninsula and several large areas along the Gulf coast, still remains without settlement. This is doubtless due, in part to the nature of the country, being alternately swamp and hummock, and in part to the hostility of the Seminole Indians, who still occupy nearly all of the peninsula.

The frontier line in 1840 has a length of 3,300 miles. This shrinking in its length is due to its rectification on the northwest and southwest, owing to the filling out of the entire interior. It incloses an area of 900,658 square miles, all lying between latitude 29° and 46° 30′ north, and longitude 67° and 95° 30′ west. The vacant tracts have, as noted above, decreased, although they are still quite considerable in Missouri and Arkansas. The total area of the vacant tracts is 95,516 square miles. The settled area outside the frontier line is notably small, and amounts, in the aggregate, to only 2,150 miles, making the entire settled area 807,292 square miles in 1840. The aggregate population being 17,069,453, the average density is 21.1 to the square mile.

1850

Between 1840 and 1850 the limits of our country have been further extended by the annexation of the state of Texas and of territory acquired from Mexico by the treaty of Guadalupe Hidalgo. The states of Iowa, Wisconsin, and Florida have been admitted to the Union, and

the territories of Minnesota, Oregon, and New Mexico have been created. An examination of the maps shows that the frontier line has changed very little during this decade. At the western border of Arkansas the extension of settlement is peremptorily limited by the boundary of the Indian territory; but, curiously enough also, the western boundary of Missouri puts almost a complete stop to all settlement, notwithstanding that some of the most densely populated portions of the state lie directly on that boundary.

In Iowa settlements have made some advance, moving up the Missouri, the Des Moines, and other rivers. The settlements in Minnesota at and about St. Paul, which appeared in 1840, are greatly extended up and down the Mississippi river, while other scattering bodies of population appear in northern Wisconsin. In the southern part of the state settlement has made considerable advance, especially in a northeastern direction, toward Green bay. In Michigan the change has been very slight.

Turning to the southwest we find Texas, for the first time on the map of the United States, with a considerable extent of settlement; in general, however, it is very sparse, most of it lying in the eastern part of the state, and being largely dependent upon the grazing industry.

The included unsettled areas now are very small and few in number. There still remains one in southern Missouri, in the hilly country; a small one in northeastern Arkansas, in the swampy and alluvial region; and one in the similar country in the Yazoo bottom-lands. Along the coast of Florida are found two patches of considerable size, which are confined to the swampy coast regions. The same is the case along the coast of Louisiana. The sparse settlements of Texas are also interspersed with several patches devoid of settlement. In southern Georgia the large vacant space heretofore noted, extending also into northern Florida, has entirely disappeared, and the Florida settlements have already reached southward to a considerable distance in the peninsula, being now free to extend without fear of hostile Seminoles, the greater part of whom have been removed to the Indian territory.

The frontier line, which now extends around a considerable part of Texas and issues on the Gulf coast at the mouth of the Nueces river, is 4,500 miles in length. The aggregate area included by it is 1,005,213 square miles, from which deduction is to be made for vacant spaces, in all, 64,339 square miles. The isolated settlements lying outside this body in the western part of the country amount to 4,775 square miles.

But it is no longer by a line drawn around from the St. Croix river to the Gulf of Mexico that we embrace all the population of the United States, excepting only a few outlying posts and small settlements. We may now, from the Pacific, run a line around 80,000 miners and adventurers, the pioneers of more than one state of the Union soon to arise on that coast. This body of settlement has been formed, in the main, since the acquisition of the territory by the United States, and, it might even be said, within the last year (1849-'50), dating from the discovery of gold in California. These settlements may be computed rudely at 33,600 square miles, making a total area of settlement at that date of 979,249 square miles, the aggregate population being 23,191,876, and the average density of settlement 23.7 to the square mile.

1860

Between 1850 and 1860 the territorial changes noted are as follows: The strip of Arizona and New Mexico south of the Gila river has been acquired from Mexico by the Gadsden purchase (1853); Minnesota territory has been admitted as a state; Kansas and Nebraska territories have been formed from parts of Missouri territory; California and Oregon have been admitted as states, while, in the unsettled parts of the Cordilleran region, two new territories (Utah and Washington) have been formed out of parts of that *terra incognita* which we bought from France as a part of Louisiana, and of that which we acquired by conquest from Mexico. At this date we note the first extension of settlements beyond the line of the Missouri river. The march of settlement up the slope of the great plains has begun. In Kansas and Nebraska population is now found beyond the 97th meridian. Texas has filled up even more rapidly, its extreme settlements reaching to the 100th meridian, while the gaps noted at the date of the last census have all been filled by population. The incipient settlements about St. Paul, in Minnesota, have grown like Jonah's gourd, spreading in all directions, and forming a broad band of union with the main body of settlement down the line of the Mississippi river. In Iowa settlements have crept steadily northwestward along the course of the drainage, until the state is nearly covered. Following up the Missouri, population has reached out into the southeastern corner of the present area of Dakota. In Wisconsin the settlements have moved at least one degree farther north, while in the lower peninsula of Michigan they have spread up the lake shores, nearly encircling it on the side next lake Michigan. On the upper peninsula the little settlements which appeared in 1850 in the copper region on Keeweenaw point

have extended and increased greatly in density as that mining interest has developed in value. In northern New York there is, apparently, no change in the unsettled area. In northern Maine we note, for the first time, a decided movement toward the settlement of its unoccupied territory, in the extension of the settlements on its eastern and northern border up the St. John river. The unsettled regions in southern Missouri, northeastern Arkansas, and northwestern Mississippi have become sparsely covered by population. Along the Gulf coast there is little or no change. There is to be noted a slight extension of settlement southward in the peninsula of Florida.

The frontier line now measures 5,300 miles, and embraces 1,126,518 square miles, lying between latitude 28° 30′ and 47° 30′ north, and between longitude 67° and 99° 30′ west. From this deduction should be made on account of vacant spaces, amounting to 39,139 square miles, found mainly in New York and along the Gulf coast. The outlying settlements beyond the 100th meridian are now numerous. They include, among others, a strip extending far up the Rio Grande in Texas, embracing 7,475 square miles (a region given over to the raising of sheep), while the Pacific settlements, now comprising one sovereign state, are nearly three times as extensive as at 1850, embracing 99,900 square miles. The total area of settlement in 1860 is thus 1,194,754 square miles; the aggregate population is now 31,443,321, and the average density of settlement 26.3 to the square mile.

CHAPTER XII

INLAND COMMERCE AND INTERNAL IMPROVEMENTS, 1816–1860

I. Stagecoach Travel

A. *Traveling by Stagecoach in Virginia, 1835*[1]

Because of the generally bad state of the roads and of the incompetence of drivers, traveling by stagecoach was slow and tedious. During the rainy seasons of the year, the passengers were subjected to endless inconveniences, and often times their lives were endangered. A journey of a hundred miles consumed more time and was as expensive as a journey by railroad ten times that distance at the present time. No one part of the country had any distinct advantages in road improvement. The roads were likely to be cut in deep ruts, washed out, and even impassable. Travelers, especially those from England, complained about the conditions of stagecoach travel. In their many books of travel they compared conditions in the United States with those in England, to the decided disadvantage of the former.

One of the best known of these travelers, Charles Augustus Murray, has given interesting accounts of his experiences with stagecoach drivers; no doubt such experiences were common everyday occurrences in the lives of the American traveling public.

On leaving Fredericsburgh for Richmond, by the stage, I was warned of the bad state of the roads; but, encouraged by what I had already gone through in safety, I smiled at such perils; and confiding in the stout setting of my bones, resigned myself without fear to a vehicle, in which I formed the ninth passenger, and which promised to reach Richmond in twelve hours, the distance being about sixty or seventy miles. As we began the journey at two P. M., we hoped to conclude it about the same hour in the morning.

After jolting some eight miles in two hours, I began to doubt the calculation of *speed;* that of *safety* was placed agreeably beyond all doubt, by meeting the stage *from* Richmond, containing several passengers with their heads bandaged with blood-stained napkins. We

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[1] *Travels in North America.* By The Hon. Charles Augustus Murray (London, 1839), I, 155–6.

found on inquiry, that they had been upset only once, and had received these cuts and contusions. I congratulated myself on being in this "safety" line, as the opposition, or mail-stage, had upset *twice* that same night, thereby proving that our chance of escape with life and unbroken limbs was two to one greater than that of our mail-competitors.

It is needless to dwell on the horrors of that night: it was found impossible to drag the load of passengers and luggage through the mud; we were consequently divided into two stages; and I heard the negro who drove the last, which contained my valuable person, say, as he mounted the box at nightfall, "I hope we shan't up*sit*, as I ha'nt driv' this road this two month." Under his experimental guidance we certainly did receive such a jolting as I had never supposed a carriage capable of enduring; and the courage with which he led it on to charge stumps and trees, and to plunge into mud-holes, in the dark, excited my admiration. It called forth, however, other feelings from one of my companions, who vented his alarm and anger in a variety of expressions, which would have formed a valuable supplement to any dictionary of malediction or blasphemy. We arrived only four or five hours after the time appointed, and I felt nearly as much relieved as when my foot first touched the shore of Fayal. The description here given of this road is not overdrawn. I will defy pen, pencil, or malice to do it; and it must be remembered, that it is the great high road (1835) from the Capital of Virginia to the seat of the Federal Government.

B. *Plight of a Traveler in the South, 1835*[1]

Another English traveler, Harriet Martineau, the "deaf lady," describes the hardships of stage travel as follows:

I found, in travelling through the Carolinas and Georgia, that the drivers consider themselves entitled to get on by any means they can devise: that nobody helps and nobody hinders them. It was constantly happening that the stage came to a stop on the brink of a wide and a deep puddle, extending all across the road. The driver helped himself, without scruple, to as many rails of the nearest fence as might serve to fill up the bottom of the hole, or break our descent into it. On inquiry, I found it was not probable that either road or fence would be mended till both had gone to absolute destruction.

The traffic on these roads is so small, that the stranger feels himself almost lost in the wilderness. In the course of several days' journey,

[1] *Society in America.* By Harriet Martineau (London, 1837), II, 172–6.

we saw, (with the exception of the wagons of a few encampments,) only one vehicle besides our own. It was a stage returning from Charleston. Our meeting in the forest was like the meeting of ships at sea. We asked the passengers from the south for news from Charleston and Europe; and they questioned us about the state of politics at Washington. The eager vociferation of drivers and passengers was such as is very unusual, out of exile. We were desired to give up all thoughts of going by the eastern road to Charleston. The road might be called impassable; and there was nothing to eat by the way. So we described a circuit, by Camden and Columbia.

An account of an actual day's journey will give the best idea of what travelling is in such places. We had travelled from Richmond, Virginia, the day before, (March 2nd, 1835,) and had not had any rest, when, at midnight, we came to a river which had no bridge. The "scow" had gone over with another stage, and we stood under the stars for a long time; hardly less than an hour. The scow was only just large enough to hold the coach and ourselves; so that it was thought safest for the passengers to alight, and go on board on foot. In this process, I found myself over the ankles in mud. A few minutes after we had driven on again, on the opposite side of the river, we had to get out to change coaches; after which we proceeded, without accident, though very slowly, till daylight. Then the stage sank down into a deep rut, and the horses struggled in vain. We were informed that we were "mired," and must all get out. I stood for sometime to witness what is very pretty for once; but wearisome when it occurs ten times a day. The driver carries an axe, as a part of the stage apparatus. He cuts down a young tree, for a lever, which is introduced under the nave of the sunken wheel; a log serving for a block. The gentleman passengers all help; shouting to the horses, which tug and scramble as vigorously as the gentlemen. We ladies sometimes gave our humble assistance by blowing the driver's horn. Sometimes a cluster of negroes would assemble from a neighbouring plantation; and in extreme cases, they would bring a horse, to add to our team. The rescue from the rut was effected in any time from a quarter of an hour to two hours. . . .

. . . Half a mile before reaching the place where we were to have tea, the thorough-brace broke, and we had to walk through a snow shower to the inn. We had not proceeded above a quarter of a mile from this place when the traces broke. After this, we were allowed to sit still in the carriage till near seven in the morning, when we were approaching Raleigh, North Carolina. We then saw a carriage

"mired" and deserted by driver and horses, but tenanted by some travellers who had been waiting there since eight the evening before. While we were pitying their fate, our vehicle once more sank into a rut. It was, however, extricated in a short time, and we reached Raleigh in safety.

II. Early Navigation of the Western Rivers

Primitive Methods, 1832 [1]

The Mississippi River and its tributaries were important factors in the economic development of the United States. Down these streams the surplus products of the western farms were sent to New Orleans, and from that point they were shipped to the northern states or to Europe. Before the introduction of the steamboat on the Ohio River in the year 1811, some form of raft or flatboat was extensively used by the settlers and traders for transporting goods on the river, and even after the steamboat had come into general use as a carrier of freight upstream these rude crafts were employed extensively in the down-river trade. Mr. Flint, whose long residence in the Mississippi Valley made him an authority on early river traffic, describes it as follows:

The barge is of the size of an Atlantic schooner, with a raised and outlandish looking deck. It had sails, masts and rigging not unlike a sea vessel, and carried from fifty to an hundred tons. It required twenty-five or thirty hands to work it up stream. On the lower courses of the Mississippi, when the wind did not serve, and the waters were high, it was worked up stream by the operation that is called 'warping,' — a most laborious, slow and difficult mode of ascent, and in which six or eight miles a day was good progress. It consisted in having two yawls, the one in advance of the other, carrying out a warp of some hundred yards in length, making it fast to a tree, and then drawing the barge up to that tree by the warp. When that warp was coiled, the yawl in advance had another laid, and so on alternately. From ninety to an hundred days was a tolerable passage from New Orleans to Cincinnati. In this way the intercourse between Pittsburgh, Cincinnati, Louisville, Nashville, and St. Louis, for the more important purposes of commerce, was kept up with New Orleans. One need only read the journal of a barge on such an ascent, to comprehend the full value of the invention of steam boats. They are now gone into disuse, and we do not remember to have seen a barge for some years, except on the waters above the mouth of the Ohio.

[1] *The History and Geography of the Mississippi Valley.* By Timothy Flint (Cincinnati, 1832), I, 151–3.

The keel boat is of a long, slender and elegant form, and generally carries from fifteen to thirty tons. Its advantage is in its small draft of water, and the lightness of its construction. It is still used on the Ohio and upper Mississippi in low stages of water, and on all the boatable streams where steam boats do not yet run. Its propelling power is by oars, sails, setting poles, the cordelle, and when the waters are high, and the boats run on the margin of the bushes, 'bush-whacking,' or pulling up by the bushes. Before the invention of steam boats, these boats were used in the proportion of six to one at the present time.

The ferry flat is a scow-boat, and when used as a boat of descent for families, has a roof, or covering. These are sometimes, in the vernacular phrase, called 'sleds.' The Alleghany or Mackinaw skiff, is a covered skiff, carrying from six to ten tons; and is much used on the Alleghany, the Illinois, and the rivers of the upper Mississippi and Missouri. Periogues are sometimes hollowed from one very large tree, or from the trunks of two trees united, and fitted with a plank rim. They carry from one to three tons. There are common skiffs, canoes and 'dug-outs,' for the convenience of crossing the rivers; and a select company of a few travellers often descend in them to New Orleans. Hunters and Indians, and sometimes passengers, make long journeys of ascent of the rivers in them. Besides these, there are anomalous water crafts, that can hardly be reduced to any class, used as boats of passage or descent. We have seen flat boats, worked by a wheel, which was driven by the cattle, that were conveying to the New Orleans market. There are horse boats of various constructions, used for the most part as ferry boats; but sometimes as boats of ascent. Two keel boats are connected by a platform. A pen holds the horses, which by circular movement propel wheels. We saw United States' troops ascending the Missouri by boats, propelled by tread wheels; and we have, more than once, seen a boat moved rapidly up stream by wheels, after the steam boat construction, propelled by a man turning a crank.

But the boats of passage and conveyance, that remain after the invention of steam boats, and are still important to those objects, are keel boats and flats. The flat boats are called, in the vernacular phrase, 'Kentucky flats,' or 'broad-horns.' They are simply an oblong ark, with a roof slightly curved from the center to shed rain. They are generally about fifteen feet wide, and from fifty to eighty, and sometimes an hundred feet in length. The timbers of the bottom are massive beams; and they are intended to be of great strength; and

to carry a burden of from two to four hundred barrels. Great numbers of cattle, hogs and horses are conveyed to market in them. We have seen family boats of this description, fitted up for the descent of families to the lower country, with a stove, comfortable apartments, beds, and arrangements for commodious habitancy. We see in them ladies, servants, cattle, horses, sheep, dogs and poultry, all floating on the same bottom; and on the roof the looms, ploughs, spinning wheels and domestic implements of the family.

Much of the produce of the upper country, even after the invention of steam boats, continues to descend to New Orleans in Kentucky flats. They generally carry three hands; and perhaps a supernumerary fourth hand, a kind of supercargo. This boat, in the form of a parallelogram, lying flat and dead in the water, and with square timbers below its bottom planks, and carrying such a great weight, runs on a sandbar with a strong headway, and ploughs its timbers into the sand; and it is, of course, a work of extreme labor to get the boat afloat again. Its form and its weight render it difficult to give it a direction with any power of oars. Hence, in the shallow waters, it often gets aground. When it has at length cleared the shallow waters, and gained the heavy current of the Mississippi, the landing such an unwieldy water craft, in such a current, is a matter of no little difficulty and danger.

III. Effects of the Steamboat on Inland Commerce

Changes in Rates and Speed, 1816–1856 [1]

The introduction of the steamboat on the western rivers stimulated freight and passenger traffic by reducing fares and charges of transportation and by furnishing additional safety and comfort. An authority on this subject described the effects as follows:

The extent to which steam navigation has improved our country, is scarcely realized even by those who have travelled over it the most. The Hudson river, from the first voyage of the North River, Fulton's steamboat, up to the present time, has remained at the head of all competitors in river navigation. We had then two trips per week, each consuming from thirty to thirty-six hours; we have now four passenger boats per day over the entire route, and many making short trips, besides those used for towing barges and canal boats; the passenger boats making the entire trip of one hundred and

[1] *Eighty Years' Progress.* By Thomas P. Kettell (Hartford, 1869), 234–40.

fifty miles in from ten to twelve hours. The increased prosperity of New York, growing out of this immense traffic by steamboats alone, is very great, but even this is small when compared with the navigation of the Mississippi and the other western rivers. In 1856 there were over one thousand steamboats and propellers on the western waters, costing not less than nineteen millions of dollars, and of a carrying capacity of four hundred and forty-three thousand tons. Of these boats, the smallest was the Major Darien, of ten tons, built at Freedom in 1852; and the largest was the Eclipse, of one thousand one hundred and seventeen tons, built at New Albany the same year. Thus, on the western waters, in the short space of forty-five years, steam created a business that absorbed nineteen millions of dollars in steamboats alone.

Up to the year 1811, the only regular method of transportation had been by means of flat boats, which consumed three or four months in the passage from New Orleans to Pittsburg. The price of passage was then one hundred and sixty dollars; freight, six dollars and seventy-five cents per hundred pounds. The introduction of steam has reduced the price of passage between these two cities to thirty dollars, and merchandise is carried the whole distance for a price which may be regarded as merely nominal. Besides this great saving of time and money effected by steam navigation on these waters, the comparative safety of steam conveyance is an item which especially deserves our notice. Before the steam dispensation began, travellers and merchants were obliged to trust their lives and property to the bargemen, many of whom were suspected, with very good reason, to be in confederacy with the land robbers who infested the shores of the Ohio, and the pirates who resorted to the islands of the Mississippi. These particulars being understood, we are prepared to estimate the value and importance of the services which the steam engine has rendered to the commerce and prosperity of the western states.

In 1811, Messrs. Fulton and Livingston, having established a ship-yard at Pittsburg for the purpose of introducing steam navigation on the western waters, built an experimental boat for this service — and this was the first steamboat that ever floated on the western rivers. It was furnished with a stern wheel and two masts — for Mr. Fulton believed, at that time, that the occasional use of sails would be indispensable. This first western steamboat was called the Orleans; her capacity was one hundred tons. In the winter of 1812, she made her first trip from Pittsburg to New Orleans in fourteen days.

The first appearance of this vessel on the Ohio river produced, as the reader may suppose, not a little excitement and admiration. A steamboat at that day was, to common observers, as great a wonder as a navigable balloon would be at the present. The banks of the river, in some places, were thronged with spectators, gazing in speechless astonishment at the puffing and smoking phenomenon. The average speed of this boat was only about three miles per hour. Before her ability to move through the water without the assistance of sails or oars had been fully exemplified, comparatively few persons believed that she could possibly be made to answer any purpose of real utility. In fact, she had made several voyages before the general prejudice began to subside, and for some months, many of the river merchants preferred the old mode of transportation, with all its risks, delays, and extra expense, rather than make use of such a contrivance as a steamboat, which, to their apprehensions, appeared too marvellous and miraculous for the business of every-day life. How slow are the masses of mankind to adopt improvements, even when they appear to be most obvious and unquestionable!

The second steamboat of the west, was a diminutive vessel called the Comet. She was rated at twenty-five tons. Daniel D. Smith was the owner, and D. French the builder of this boat. Her machinery was on a plan for which French had obtained a patent in 1809. She went to Louisville in the summer of 1813, and descended to New Orleans in the spring of 1814. She afterward made two voyages to Natchez, and was then sold, taken to pieces, and the engine was put up in a cotton factory. The Vesuvius was the next; she was built by Mr. Fulton, at Pittsburg, for a company, the several members of which resided at New York, Philadelphia, and New Orleans. She sailed under the command of Captain Frank Ogden, for New Orleans, in the spring of 1814. From New Orleans, she started for Louisville, in July of the same year, but was grounded on a sand-bar, seven hundred miles up the Mississippi, where she remained until the 3d of December following, when, being floated off by the tide, she returned to New Orleans. In 1815–16, she made regular trips for several months, from New Orleans to Natchez, under the command of Captain Clement. This gentleman was soon after succeeded by Captain John D. Hart, and while approaching New Orleans, with a valuable cargo on board, she took fire and burned to the water's edge. After being submerged for several months, her hulk was raised and refitted. She was afterward in the Louisville trade, and was condemned in 1819.

In 1818, the first steamboat was built for Lake Erie and the upper lakes, at Black Rock, on the Niagara river, for the late Dr. I. B. Stuart, of Albany, N. Y., by Noah Brown, of New York city. She was a very handsome vessel, 360 tons burden, brig rigged, and her engine, on the plan of a Boulton and Watt square engine, was made by Robert McQueen, at the corner of Centre and Duane streets, New York city; her cylinder was 40 inches diameter, 4 feet stroke. The materials for making the boiler were sent from New York, and the boiler was made at Black Rock — 9 feet diameter, 24 feet long — a circular boiler, with one return flue, called a kidney flue, seldom, if ever, carrying more than nine inches of steam. This steamer was called the Walk-in-the-Water, after a celebrated Indian chief in Michigan. Her engines were transported from New York to Albany by sloops, and from Albany to Buffalo by large six and eight horse Pennsylvania teams. Some of the engine was delivered in fifteen days time, and some was on the road about twenty-five days.

The trip from Black Rock, or Buffalo, to Detroit, consumed about forty hours in good weather, using thirty-six to forty cords of wood the trip. The price of passage in the main cabin was eighteen dollars; from Buffalo to Erie (Penn.), six dollars; to Cleveland, twelve dollars; to Sandusky (Ohio), fifteen dollars; to Detroit, eighteen dollars. The strength of the rapids at the head of the Niagara river, between Buffalo and Black Rock, was so great, that besides the power of the engine, the steamer had to have the aid of eight yoke of oxen to get her up on to the lake, a distance of about two and one-half miles. In those days, the passenger and freighting business was so small, that one dividend only was made to the owners for the first three years from the earnings of the steamer. In 1821, in the fall, the steamer was totally lost in a terrible gale. On the coming winter, a new steamer was built at Buffalo, by Mr. Noah Brown of New York — a very strong, brig-rigged vessel. She was called the Superior, flush decks fore and aft; the first steamer, the Walk-in-the-Water, having had a high quarter or poop deck.

Compare the *time* and *expense* of travelling in those days with the present time! Mr. Calhoun (now living), the engineer of the Walk-in-the-Water, says, "Every two years I used to return to New York from Buffalo in the fall, and in the spring from New York to Buffalo. I have been *three* and *four* days, by stage, to Albany; never less than three days, and sometimes near five days; the stage fare was ten dollars to Albany. From Albany to Buffalo, I have been ten days in getting through; the shortest time was eight days;

the stage fare through, was *twenty-one* dollars. *How is it now?* My usual expense in going to Buffalo from Albany was thirty dollars, including meals and sleeping." Such facts show the advantages we have obtained from the use of steam in our river navigation.

The boats that then plied upon the Hudson river, would not be sufficient to carry the passengers' baggage of the present day. The first boat was only 160 tons, while the New World, built in 1847, was of 1400. The latter has made the trip from New York to Albany in seven hours and fifteen minutes, including nine landings of say five minutes each; the actual running time being six hours and twenty minutes; distance, one hundred and fifty miles — performed by the North River in thirty-six hours.

IV. Federal Aid for Internal Improvements

A. *Internal Improvements and the National Defense, 1819* [1]

In the early part of the century, internal improvements were considered to be closely related to the national defense. Hence there was a feeling that the United States government ought to aid in the building of such improvements. On this subject, John C. Calhoun, Secretary of War in President Monroe's Cabinet, advised as follows:

It remains, in relation to the defence of the Atlantic frontier, to consider the means of communication between it and the western States, which require the aid of the Government. Most of the observations made relative to the increased strength and capacity of the country to bear up under the pressure of war, from the coastwise communication, are applicable in a high degree at present, and are daily becoming more so, to those with the western States; and should a war for conquest ever be waged against us, (an event not probable, but not to be laid entirely out of view,) the roads and canals necessary to complete the communication with that portion of our country would be of the utmost importance.

The interest of commerce and the spirit of rivalry between the great Atlantic cities will do much to perfect the means of intercourse with the west. The most important lines of communication appear to be from Albany to the lakes; from Philadelphia, Baltimore, Washington, and Richmond, to the Ohio river; and from Charleston and Augusta to the Tennessee — all of which are now commanding the

[1] *Report of John C. Calhoun, Secretary of War, on Internal Improvements.* American State Papers (Washington, 1834). Series Miscellaneous, II, 535–6.

attention, in a greater or less degree, of the sections of the country immediately interested. But in such great undertakings, so interesting in every point of view to the whole Union, and which may ultimately become necessary to its defence, the expense ought not to fall wholly on the portions of the country more immediately interested. As the Government has a deep stake in them, and as the system of defence will not be perfect without their completion, it ought at least to bear a proportional share of the expense of their construction.

I proceed next to consider the roads and canals connected with the defence of our northern frontier. That portion of it which extends to the east of Lake Champlain has not heretofore been the scene of extensive military operations, and I am not sufficiently acquainted with the nature of the country to venture an opinion whether we may hereafter be called on to make considerable military efforts in that quarter. Without, then, designating any military improvements as connected with this portion of our northern frontier, I would suggest the propriety, should Congress approve of the plan for a military survey of the country, to be hereafter proposed, to make a survey of it the duty of the engineers who may be designated for that purpose.

For the defence of the other part of this line of frontier, the most important objects are, a canal or water communication between Albany and Lake George and Lake Ontario, and between Pittsburg and Lake Erie. The two former have been commenced by the State of New York, and will, when completed, connected with the great inland navigation along the coast, enable the Government, at a moderate expense and in a short time, to transport munitions of war, and to concentrate its troops from any portion of the Atlantic States, fresh and unexhausted by the fatigue of marching, on the inland frontier of the State of New York. The road, commenced by order of the Executive, from Plattsburg to Sackett's Harbor, is essentially connected with military operations on this portion of the northern frontier. A water communication from Pittsburg to Lake Erie would greatly increase our power on the upper lakes. The Allegany river, by its main branch, is said to be navigable within seven miles of Lake Erie, and by French creek within sixteen miles. Pittsburg is the great military depot of the country to the west of the Alleganies, and, if it were connected by a canal with Lake Erie, would furnish military supplies with facility to the upper lakes, as well as to the country watered by the Mississippi. If to these communications we add a road from Detroit to Ohio, which has already been com-

menced, and a canal from the Illinois river to Lake Michigan, which the growing population of the State of Illinois renders very important, all the facilities which would be essential "to carry on military operations in time of war, and the transportation of the munitions of war" for the defence of the western portion of our northern frontier, would be afforded.

It only remains to consider the system of roads and canals connected with the defence of our southern frontier, or that on the Gulf of Mexico. For the defence of this portion of our country, though at present weak of itself, nature has done much. The bay of Mobile, and the entrance into the Mississippi through all its channels, are highly capable of defence. A military survey has been made, and the necessary fortifications have been commenced, and will be in a few years completed. But the real strength of this frontier is the Mississippi, which is no less the cause of its security than that of its commerce and wealth. Its rapid stream, aided by the force of steam, can, in the hour of danger, concentrate at once an irresistible force. Made strong by this noble river, little remains to be done by roads and canals for the defence of our southern frontier. The continuation of the road along the Atlantic coast from Milledgeville to New Orleans, and the completion of the road which has already been commenced from Tennessee river to the same place, with the inland navigation through the canal of Carondelet, Lake Pontchartrain, and the islands along the coast, to Mobile, covered against the operations of a naval force, every facility required for the transportation of munitions of war, and movements and concentration of troops, to protect this distant and important frontier, would be afforded.

Such are the roads and canals which military operations in time of war, the transportation of the munitions of war, and the more complete defence of the United States, require.

Many of the roads and canals which have been suggested are no doubt of the first importance to the commerce, the manufacture, the agriculture, and political prosperity of the country, but are not, for that reason, less useful or necessary for military purposes. It is, in fact, one of the great advantages of our country, enjoying so many others, that, whether we regard its internal improvements in relation to military, civil, or political purposes, very nearly the same system, in all its parts, is required. The road or canal can scarcely be designated, which is highly useful for military operations, which is not equally required for the industry or political prosperity of the community. If those roads or canals had been pointed out which are

necessary for military purposes only, the list would have been small indeed. I have, therefore, presented all, without regarding the fact that they might be employed for other uses which, in the event of war, would be necessary to give economy, certainty, and success to our military operations, and which, if they had been completed before the late war, would, by their saving in that single contest in men, money, and reputation, have more than indemnified the country for the expense of their construction. I have not prepared an estimate of expenses, nor pointed out the particular routes for the roads of canals recommended, as I conceive that this can be ascertained with satisfaction only by able and skilful engineers, after a careful survey and examination. . . .

B. *Veto of the Maysville Road Bill, 1830* [1]

By 1830 a majority of the people opposed granting federal aid for internal improvements. President Jackson's veto of the Maysville Road Bill, which reflected the feeling of that majority, caused the states to take up the work. Jackson's objections were largely on constitutional grounds, but he also argued that it was economically unsound for the government to undertake such enterprises:

GENTLEMEN: I have maturely considered the bill proposing to authorize "a subscription of stock in the Maysville, Washington, Paris, and Lexington Turnpike Road Company," and now return the same to the House of Representatives, in which it originated, with my objections to its passage. . . .

In the Administration of Mr. Jefferson we have two examples of the exercise of the right of appropriation, which in the considerations that led to their adoption and in their effects upon the public mind have had a greater agency in marking the character of the power than any subsequent events. I allude to the payment of $15,000,000 for the purchase of Louisiana and to the original appropriation for the construction of the Cumberland road, the latter act deriving much weight from the acquiescence and approbation of three of the most powerful of the original members of the Confederacy, expressed through their respective legislatures. Although the circumstances of the latter case may be such as to deprive so much of it as relates to the actual construction of the road of the force of an obligatory exposition of the Constitution, it must, nevertheless, be admitted that so far as the mere appropriation of money is concerned they present the principle in its most imposing aspect. No less than twenty-

[1] *Messages and Papers of the Presidents.* Edited by James D. Richardson ([Washington], 1895–1903), II, 483, 485–6, 492.

three different laws have been passed, through all the forms of the Constitution, appropriating upward of $2,500,000 out of the National Treasury in support of that improvement, with the approbation of every President of the United States, including my predecessor, since its commencement.

Independently of the sanction given to appropriations for the Cumberland and other roads and objects under this power, the Administration of Mr. Madison was characterized by an act which furnishes the strongest evidence of his opinion of its extent. A bill was passed through both Houses of Congress and presented for his approval, "setting apart and pledging certain funds for constructing roads and canals and improving the navigation of water courses, in order to facilitate, promote, and give security to internal commerce among the several States and to render more easy and less expensive the means and provisions for the common defense." Regarding the bill as asserting a power in the Federal Government to construct roads and canals within the limits of the States in which they were made, he objected to its passage on the ground of its unconstitutionality, declaring that the assent of the respective States in the mode provided by the bill could not confer the power in question; that the only cases in which the consent and cession of particular States can extend the power of Congress are those specified and provided for in the Constitution, and superadding to these avowals his opinion that "a restriction of the power 'to provide for the common defense and general welfare' to cases which are to be provided for by the expenditure of money would still leave within the legislative power of Congress all the great and most important measures of Government, money being the ordinary and necessary means of carrying them into execution." I have not been able to consider these declarations in any other point of view than as a concession that the right of appropriation is not limited by the power to carry into effect the measure for which the money is asked, as was formerly contended.

The views of Mr. Monroe upon this subject were not left to inference. During his Administration a bill was passed through both Houses of Congress conferring the jurisdiction and prescribing the mode by which the Federal Government should exercise it in the case of the Cumberland road. He returned it with objections to its passage, and in assigning them took occasion to say that in the early stages of the Government he had inclined to the construction that it had no right to expend money except in the performance of acts authorized by the other specific grants of power, according to a

strict construction of them, but that on further reflection and observation his mind had undergone a change; that his opinion then was "that Congress have an unlimited power to raise money, and that in its appropriation they have a discretionary power, restricted only by the duty to appropriate it to purposes of common defense, and of general, not local, national, not State, benefit;" and this was avowed to be the governing principle through the residue of his Administration. The views of the last Administration are of such recent date as to render a particular reference to them unnecessary. It is well known that the appropriating power, to the utmost extent which had been claimed for it, in relation to internal improvements was fully recognized and exercised by it. . . .

If it be the desire of the people that the agency of the Federal Government should be confined to the appropriation of money in aid of such undertakings, in virtue of State authorities, then the occasion, the manner, and the extent of the appropriations should be made the subject of constitutional regulation. This is the more necessary in order that they may be equitable among the several States, promote harmony between different sections of the Union and their representatives, preserve other parts of the Constitution from being undermined by the exercise of doubtful powers or the too great extension of those which are not so, and protect the whole subject against the deleterious influence of combinations to carry by concert measures which, considered by themselves, might meet but little countenance.

V. Effects of the Erie Canal

Development of Internal Improvements in the West, 1825–1850 [1]

The opening of the Erie Canal in 1825, and its immediate success as a means of connecting New York City with the Great Lake trade, caused similar attempts to be made in other states. The cities of Philadelphia and Baltimore began at once to project railroads and canals in an effort to get western trade, while Ohio, Indiana, Illinois and other western states undertook elaborate systems of internal improvements. Mr. H. V. Poor, whose writings on railroads and canals have come to be accepted as authoritative, discusses these undertakings as follows:

Previous to the construction of the Erie Canal, the cost of transporting a ton of merchandise or produce from the City of New York to the City of Buffalo was $100. The time required was 20 days!

[1] *Manual of the Railroads of the United States for 1868–69.* By H. V. Poor (New York, 1868), 12–15.

The cost and the time involved in this case was a striking illustration of the condition of the whole country; of the necessity of improved highways, and of the influence they have exerted in the creation of wealth, as well as their social and political importance. Upon the opening of the canal, the cost of transportation from Buffalo to New York was reduced from $100 to $5 per ton, and the time from 20 to 6 days. Previous to its construction, wheat grown in Central and Western New York was floated, in *arks*, down the Delaware and Susquehanna Rivers to market — to Philadelphia and Baltimore. The City of New York — which now draws from districts 2,000 miles distant, by the routes used, its vast supplies of grain for distribution throughout all the Eastern States, and for its foreign trade — was, a little over forty years ago, almost completely cut off from the trade of its own State. The cost of transporting wheat for 300 miles over ordinary highways will equal its average value at the point of consumption. Indian corn will bear transportation over earth roads only about 100 miles. With the improvements that have been made in the construction of highways, the great bulk of supplies of wheat and corn for the Eastern markets are now grown in Central Illinois and in the vast region lying to the west and northwest of Lake Michigan. As fast as our people have moved westward in their triumphal march across the continent, the railway which they have taken with them has given a high commercial value to whatever they produce, no matter how far distant from the points of consumption. Their progress, wealth, and we may say, civilization, have been the creation, within 50 years, of the inventive genius of the race.

The success of the Erie Canal had an electric effect upon the whole country, and similar works were everywhere projected. The States of Pennsylvania, Maryland, Ohio, Indiana and Illinois at once embarked upon elaborate systems designed to give to every portion of their States the advantage of such works. Virginia, also, undertook the construction of a canal from the Chesapeake up the valley of the James River to the Ohio. We have not the space to give even a sketch of the progress and results of these undertakings. While very great advantages in many cases were secured, all the canals constructed in the United States, except the Erie, the Delaware and Raritan, and the Chesapeake and Delaware, may be regarded as commercial failures. They became so from the discovery of a better mode of transportation — the Railway. The State of Pennsylvania, alone, completed about 1,000 miles of canal within its territory, the whole of which have, within a few years, been disposed of at

nominal prices to private companies. Their value had been almost entirely superseded by railways, which private enterprise soon constructed upon all their routes. Already the use of portions of these canals has been abandoned, while the earnings of others, that are still kept up hardly meet the cost of their maintenance.

The great work which the State of Maryland undertook — the Chesapeake and Ohio Canal — was carried only to Cumberland, a distance of about 180 miles. It has proved to be nearly valueless, even as a local work. The James River and Kanawha Canal reached many years ago, its final terminus at the base of the Alleghany Mountains. The State of Ohio constructed two lines of limited capacity from Lake Erie to the Ohio — one from Cleveland to Portsmouth, and the other from Toledo to Cincinnati. Until railroads were constructed, which now cover that State like a network, the canals performed a highly useful service. They have now practically ceased to be carriers either of produce or merchandize. The State of Indiana was not so fortunate as Ohio. Of an immense extent of projected lines she was able to complete only *one* work, the Wabash and Erie Canal, which was opened from Toledo to Evansville, on the Ohio River. The portion of this work below Terre Haute was speedily abandoned, while that north of it is now let to private parties upon the sole condition of keeping it in repair. The State of Illinois was enabled to complete only one of the numerous works undertaken — a canal from Lake Michigan, at Chicago, to the navigable waters of the Illinois River. This canal for many years was a highly useful and important work. Its route, like that of the Erie Canal, is strikingly favorable. Its summit is only 8 feet above Lake Michigan. So nicely poised in the interior of the Continent are the Great Lakes, that a depression of their eastern bank only 8 feet below its present level would send their flood of waters — which, forming the cataract of Niagara, now find their outlet under the Arctic climate of the North Atlantic — down the Mississippi to the torrid regions of the Gulf of Mexico. Such topographical conditions on so vast a scale, have been contrived, it would seem, for the express purpose of supplying the most perfect means of intercommunication, and are fitted to excite, in the highest degree, admiration and wonder. When united to a genial climate and a wealth in mineral and soil such as are nowhere else found, they must render the country possessing such elements of power the theatre upon which is to be enacted the greatest drama of human life yet seen. . . .

VI. Early Development of Railroads

Location and Construction, 1826–1850 [1]

The success of the English railroads stimulated their building in America. Here and there short lines were laid down, primarily for the purpose of acting as feeders for canals or rivers. At first, they were handicapped by lack of effective motive power. Attempts were made to move the cars by the use of sails. The most satisfactory power was found for several years to be horses. These gave way to steam, the use of which gave the railroad a decided advantage over all other means of inland transportation.

The excitement in relation to canals and steamboats was yet at its zenith, when the air began to be filled with rumors of the new application of steam to land carriages and to railroads. There were many inventions and patents at home and abroad in relation to carriages propelled upon common roads by steam, but these seem never to have attained much success, although attempts to perfect them are still made with great perseverance. On the other hand, the use of railroads from small beginnings has reached a magnitude which overshadows the wildest imaginings of the most sanguine. In 1825 descriptions came across the water of the great success of the Darlington railroad, which was opened to supply London with coal, and which had passenger cars moved by steam at the rate of seven miles per hour. The most animated controversy sprang up in relation to the possibility of such roads in England, and was shared in to some extent on this side of the Atlantic. With the national energy of character, the idea had no sooner become disseminated than it was acted upon. The construction of railroads in America is usually ascribed to the emulation excited by the success of the Liverpool and Manchester railway. This appears not to have been the case, however, since some of the most important works in this country were projected and commenced before the Liverpool and Manchester road was built. The act of Parliament for the construction of that road was passed in 1826, and the road itself was finished and opened in September, 1830, 31 miles long; but the Massachusetts Quincy road, three miles from Quincy to Neponset, was opened in 1827, and a great celebration was held in consequence. The celebrated Mauch Chunk railroad of Pennsylvania was begun in 1826, and finished in the following year. On that road the horses which draw up the empty coal wagons are sent down on the cars which descend by their own gravity. This contrivance was borrowed by the Mauch Chunk road from the

[1] *Eighty Years' Progress.* By Thomas P. Kettell (Hartford, 1869), 191–3.

Darlington road, similarly situated, in England. It is to be remarked that both the Quincy and the Mauch Chunk roads were horse roads; the locomotive was not at first introduced. In 1828, twelve miles of the Baltimore and Ohio railroad were completed, two years before the Manchester road was opened. In the same year, 1828, the South Carolina road, from Charleston to Hamburg, was surveyed, and in Massachusetts the city of Boston voted the construction of a road from that city to the Hudson at Albany. The first portion of that road, however, Boston to Worcester, 44 miles, was not opened until 1835. The second road finished in the United States was the Richmond, Va., road, thirteen miles to Chesterfield, in 1831, and in the same year that running from New Orleans, five miles to Lake Pontchartrain, was opened. Thus roads were well adopted in public opinion here before the great success of the Manchester road was known, but which gave an undoubted impulse to the fever. During the excitement in relation to "rail" roads, a writer in a Providence paper thus satirized the condition of the Connecticut roads. He claimed the invention of the cheapest "rail" roads, and proved it thus: "Only *one* English engine *alone* costs $2,000, which sum the whole of our apparatus does not much exceed, as figures will prove; for 700 good chestnut rails at $3, amounts to only $21, and it ought to be remembered that this is *all* the expense we are at, and the inference is conclusive in our favor. We place our rails fifty to the mile by the side of the road, to pry out the wheels when they get stuck, and hoist behind when wanted." The public were, however, no longer to be satisfied with this kind of "rail" road. They embarked in the new enterprise with such vigor, that in 1836 two hundred companies had been organized, and 1,003½ miles were opened in eleven states. These were highly speculative years, however, and the revulsion brought matters to a stand.

It was at once apparent to the commercial mind that if railroads would perform what was promised for them, geographical position was no longer important to a city. In other words, that railroads would bring Boston into as intimate connection with every part of the interior as New York could be. The large water communication that enabled New York by means of steamboats to concentrate trade from all quarters, could not now compete with the rails that would confer as great advantages upon Boston. Indeed, Boston had now availed herself of steam power. Up to 1828 she owned no steamers. The Benjamin Franklin, built in that year, was the first, and her steam tonnage is now but 9,998 tons. When she bought her

first steamboat, however, she was laying out those railroad connections that she has since pushed so vigorously, and they have paid an enormous interest, if nor directly to the builders, at least to the general interests of the city.

It is to be remarked that the national government expended, as we have seen, largely in the construction of highways, the clearing out of rivers, and the improvement of harbors. The people have by individual taxes mostly constructed the earth roads of this country. The canals have, however, with a few exceptions, been state works, built by the proceeds of state loans, with the aid of lands donated by the federal government. These lands were made marketable and valuable by the action of the canals in aid of which they were granted. The railroads of the country have been, as a whole, built on a different plan, viz., by corporations, or chartered companies of individuals. These associations have not, however, themselves subscribed the whole of the money, probably not more than half, but they have found it to their interest to borrow the money on mortgage of the works. The great object of the companies has not been so much to derive a direct profit from the investment, as to cause the construction of a highway, which should by its operation increase business, enhance the value of property, and swell the floating capital of the country by making available considerable productions of industry, which before were not marketable, since the influences of a railroad in a new district is perhaps, if not to create, at least to bring into the general stock more capital than is absorbed in its construction.

Thus in the last twenty-five years, a thousand millions of dollars have been spent in the construction of roads, and yet capital is proportionally more abundant now than before this vast expenditure, and land has, in railroad localities, increased by a money value greater than the cost of the roads! We have seen that before the operation of canals, land transportation was, and is now remote from these works, one cent per mile per hundred. If a barrel of flour is then worth in market five dollars, a transportation of 300 miles would cost more than its whole value; but by rail it may be carried from Cincinnati to New York for one dollar. Thus railroads give circulation to all the surplus capital that is created by labor within their circle. It is on this principle that may be explained the immense prosperity that has been seen to attend the enormous expenditure for railroads, particularly during the last ten years.

VII. Railroads *versus* Canals

A. *Arguments for Railroads in 1832* [1]

Even before the completion of the Erie Canal, experiments in railroad building were being made. As soon as the latter appeared to be practicable and likely to compete with the canals for freight and passenger traffic, the friends of the canals began an agitation against the building of railroads. Work on the Baltimore & Ohio Railroad was retarded for years by the opposition on the part of the promoters of the Chesapeake and Ohio Canal. Likewise in New York the state discriminated against the New York Central Railroad in favor of the Erie Canal. Naturally the friends of each enterprise endeavored to convince the people of the desirability of building canals or railroads as the case might be. The controversy at last reached the stage where Congress investigated the merits of the claims of each, the main points of issue of which were as follows:

The various means which human ingenuity has devised for effecting an extensive intercourse in the present state of knowledge, consist of roads, railways, and canals.

The enterprise of our citizens was, at an early period, turned to the first, and, if we may credit accounts on this subject, scarcely less anxiety was felt at that time to obtain grants from the Legislature for the construction of turnpike roads, than is now evinced to obtain railroad privileges. These early enterprises did not yield much pecuniary profit to the stockholders; nevertheless they were of incalculable good to this young but growing country. The facilities of intercourse were promoted, and the general interests of the community were advanced. Next in succession came the desire for canals. The State having yielded her assent, the construction of the Erie canal presented at once a new and interesting view of the benefits of this mode of internal communication — the public mind again became engaged in works of internal improvement, and, to what extent this feeling prevailed, may be learned from the following extract taken from the message of the Governor in the year 1827. "The canals, which now principally occupy the public attention, embrace a navigable union of the principal bays on Long Island — of the Delaware and Hudson rivers — of the Erie canal, with the east and west branches of the Susquehannah — with the Alleghany river — with Lake Ontario, by Great Sodus bay — with Black and St. Lawrence rivers, and between the latter river and Lake Champlain; and even a canal from Lake Erie to the Hudson river, by an

[1] *Documents in Relation to the Comparative Merits of Canals and Railroads* Submitted by Mr. Howard of Maryland. (Doc. 101, Committee Report on Steam Carriages, etc., 22d Congress, 1st session, 221–5.)

entire new route, has been suggested as practicable and expedient, and urged with great earnestness and energy." At the time this message was communicated to the Legislature, only one charter for a railroad had been granted, and of so little importance was this new mode of conveyance considered, that the Governor did not even allude to the subject, and individuals could not be found possessed of means and faith sufficient to fill the stock and undertake the enterprise. The public have thus been led on from one useful and patriotic improvement to another, constantly developing new resources, and holding out for example and emulation some of the most bold, useful, and successful enterprises, that any country in any age has ever witnessed. From the knowledge we possess of the rapid advance of our fellow citizens in this knowledge of their wants and resources, and the most efficient manner of developing them, it will not be necessary for us to more than hint at the difference between the two last mentioned improvements. . . .

Canals are confined to comparatively low districts, on account of the necessity of an adequate supply of water, and of the expense and delay of locks and lockage. Railways may be made to traverse regions however elevated, and the ascents and descents are not only not limited, but they are overcome in a comparatively short space of time, owing to the great superiority which inclined planes possess over locks.

Canals experience the change of the seasons most sensibly; the drought, the floods, and the frost, are serious and insurmountable impediments to their construction, and whether they be constructed in the frigid, temperate, or torrid zone, the effect of such changes cannot be avoided.

Railways are said not to be affected by either; and certainly the two first cannot operate upon them. The last has been a subject of speculation among the inexperienced, and, as the construction of railways in this country is of so recent date, perhaps we may not be enabled to rely with implicit confidence on such experiments as have been made.

The Baltimore and Ohio Railroad Company, however, furnishes some evidence on this point, and would seem to put this question at rest. Under date of the 31st of December last, the Baltimore American says: "while all the communications by river and canal throughout the country are suspended on account of the ice, our great railroad continues in active and steady operation, *without the least interruption or hindrance from frost, snow,* or any other obstacle. The

passenger carriages, generally full both ways, have traversed the line of sixty miles between Baltimore and Frederick, *daily, since the opening of the road.*" This fact tends to prove that railroads may be used at all seasons of the year. The difference, however, between the climate of Maryland and New York, may be assigned as a reason for still urging this latter objection, and is certainly worthy of consideration.

In consequence of the almost exclusive use of steam power on railways, this question, on some routes, may be one of serious import, and would require close and satisfactory investigation, before entering upon the construction of any road, the utility and profit of which depend solely on the business of the winter: on any other route it cannot be a matter of so much moment, for if it would be a good reason to deter from the construction of railroads, it might be urged with much more force against canals. Many propositions have been made to obviate this difficulty, but as the question does not seem to be entirely settled by experience, the committee are not prepared to point out any remedy or express any opinion. They may, however, safely anticipate, that all obstacles which are not insurmountable, will be overcome by the ingenuity and enterprise of our citizens. Many difficulties have already been overcome, and, as the spirit of improvement has, by recent discovery, received a new impetus, we are warranted in the most sanguine anticipations of entire success. . . .

"Twenty years ago, we believe, the mails did not travel faster than about seven miles an hour. From seven miles it was raised to eight, and every one cried what an improvement! From eight it was raised to nine, and this was hailed as nothing less than 'prodigious!'" Attempts are making to force it up to ten miles an hour, but to any thing beyond this, to a certainty, horse power fails us. How then shall we find terms adequate to express the value of a discovery that carries us at once from ten to twenty or thirty miles an hour?

The experiments which have been made in England go far to prove that we have not yet arrived at the point where improvement in speed must cease. The present average of speed upon the Liverpool and Manchester railway is sixteen miles per hour. The maximum velocity, unloaded, is thirty-two miles per hour. With a load of thirteen tons, including many passengers, Mr. Stevenson's engine, the Rocket, travelled at the rate of fifteen miles an hour; and the engine of Braithwaite and Erickson, of London, moved at the aston-

ishing speed of twenty-eight miles an hour. "It seemed indeed," said a spectator, "to fly, presenting one of the most sublime spectacles of human ingenuity and human daring the world ever beheld. It actually made one giddy to look at it, and filled thousands with lively fear for the safety of individuals who were on it, and who seemed not to run along the earth, but to fly, as it were, on the wings of the wind. When the vehicle," he continues, "nicely poised on springs, and covered in to exclude the external current of air created by its motion, you might imagine you were in a state of perfect rest, while you are flying along the surface with the speed of a racer. Then the steam horse is not apt, like his brother of flesh and blood, to be frightened from his propriety by sudden fancies which defy the prudence and skill of the driver. Explosion, if it takes place, will not injure the passengers, for they are in a separate vehicle, and the enginemen may be trusted with the care of their own lives. In daylight, and with good arrangements, travelling in the steam coach, at twenty miles an hour, may be much more safe, as well as pleasant, than in any ordinary stage coach at eight or nine."

The practicability of railways for the transportation of passengers, has been proved beyond question, and, from recent experiments, no doubt can be entertained that every description of article will be eventually conveyed on rails. Even now, many companies in England, owning the most profitable canals in the Kingdom, contemplate draining them, and laying railways on their site. Should they do so, it will be a very strong evidence of the superiority of railways over canals in the transportation of bulky articles. . . .

The difference in the expense of constructing railways and canals have been variously estimated; some put it down at one half, others at one-third, and again we have seen it estimated as nearly equal; but, from the knowledge possessed by your committee, either derived from actual observation or indisputable authority, they are induced to believe that the cost of a railway is about two-thirds that of a canal through the same route. A single railway, or one set of tracks, with suitable turn-outs, will cost from nine to twelve thousand dollars. A double railway, with two complete sets of tracks, will cost from 15 to 18 thousand dollars per mile. These estimates are for well constructed lines of railways, through a *favorable* country, and do not include any extraordinary difficulty. Every road which is intended to pass over a large extent of country, will be more or less obstructed by mountains, streams, vallies, &c., and in all these cases, the divisions of the road will be subject to change accordingly. The

cost of that part of the Baltimore and Ohio railroad which has been completed with double tracks, consisting of 61 miles, is not precisely known; but the company are of the opinion that the average cost, to the Ohio, from the present termination, will fall but little short of $20,000 per mile.

B. *Arguments for Canals in 1830*[1]

Despite what appears to have been convincing arguments to the contrary, the friends of canals insisted that railroads were then, and would continue to be, inferior to canals as routes of travel and transportation. Illustrations of their arguments are as follows:

Railroads are a great improvement on turnpikes; but, in my opinion, are vastly inferior (particularly as a public work, and in a republican country) to canals, both as to convenience as well as economy. A canal is accessible everywhere, a railroad nowhere, (without interrupting the current of wagons,) except by an arrangement for turning out; and the more turn outs are made, the greater the casualties. By canal, every boatman may choose his own motion, within the maximum motion; by railroad, every traveller must have the same motion, or be subject to turn outs; which, as I have said, have their casualties. The motion of twenty and thirty miles an hour on railroads will be fatal to wagons, road, and loading, as well as human life.

We have a distance of eight miles from the mines, with a descent of seventy to one hundred and twelve feet in a mile. The velocity of the wagons would exceed thirty miles an hour, if not checked. Our first two months' use of the road was fifteen and twenty miles an hour, which would have soon ruined both road and wagons, and, I am persuaded, was then dearer than the turnpike we put our rails on.

Our present motion, say of six miles an hour, is very satisfactory; and makes the railroad an immensely valuable appendage to our coal business. Wet or dry, we go on it; moist and wet weather, which ruins turnpikes, makes the wagons run freer on the railroad; snow, however, is an impediment. Our wagons will not run down from the mines, by gravity, in a snow storm; the snow packs on the road. In such weather, as well as in sleety weather, we cannot use the brake,

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[1] *Documents in Relation to the Comparative Merits of Canals and Railroads.* Submitted by Mr. Howard of Maryland. (Doc. 101, Committee Report on Steam Carriages, etc., 22d Congress, 1st session, 237–8.)

as it slips too freely to produce the necessary friction to check the wagons.

I think it rather fortunate for society, that railroads are not of equal value to canals, for a railroad can be taken anywhere; and, consequently, no improvements would be safe on their line: for the moment the improvement succeeded, it would be rivalled, so as to destroy both, &c., whereas we know the line and limits of our canals, by the supply of water, and graduation of the ground; so that all improvements thereon are safe against the undermining of rivals. I should consider, that, if the railroads superseded canals, they would, for the above reasons, render the tenure or value of property as insecure as it would be if without the protection of law.

C. *Canals and Railroads — Rates and Expense of Maintenance, 1835*[1]

The controversy regarding cost of construction and the efficiency of operation was naturally closely connected to the question of rates and expense of maintenance. A committee of the New York legislature reported on these phases of the controversy in 1835 as follows:

In regard to their relative merits as affording the means of transportation, there is less difficulty in reaching an approximate ratio. In reducing them both to a level, we attain for general purposes, a fair standard of comparison. Taking the facts we have obtained as a basis, we find the relative cost of conveyance is, as 4.375 to 1, a little over four and one-third to one, in favor of canals: this is exclusive of tolls or profits. If the cost of construction, the annual cost for repairs, and the amount of tonnage were the same on a canal as on a rail-road, then the same rate of toll would produce the same rate of profit on each. Our examinations have shown, as before stated, that rail-roads in the average, cost more than canals, both in their construction and repairs. But for comparison, we assume a case in which they are equal, and charge the same toll. The average tolls on the Erie canal are less than one cent per ton per mile: assuming an average toll of one cent per ton per mile, the ratio of the entire cost of transportation and toll is, as (2.5 to 1,) two and a half to one, in favor of canals. In the preceding computations, the cost of transportations on railroads is the nett cost, as reported by rail-road companies, allowing no profits on this business, while the charges on the canals is at contract prices, which are supposed to yield a profit to the carrier.

[1] *Assembly Documents.* (Albany, N. Y., 1835), Doc. 296, pp. 42–4.

The cost of transportation on canals, as previously stated, is the average on the Erie canal, the Delaware and Hudson canal, and the Schuylkill canal; on the two latter, the cost of transporting coal only is known; and the total average of the three canals is almost exactly the same as the average price for the several different articles transported on the Erie canal. The preceding calculations are confined to a velocity not much exceeding 50 or 60 miles in 24 hours. We have not instituted any investigation to show the relative economy in high and low velocities. For the conveyance of freight, we are of the opinion, canals are not well adapted to any material increase of speed beyond 3 miles per hour; and as the speed on half of the rail-roads embraced in this computation, is from 10 to 15 miles per hour, we may consider this comparison as nearly similar to one of high velocity on rail-roads, and low velocity on canals. And goods that can afford to pay the difference above indicated, for the saving of time, would hold the two kinds of conveyance in equilibrium. The amount that would find so great an object in the saving of time, in comparison to the total quantity requiring transportation, it is believed would be small. In relation to the conveyance of passengers, the saving of time is highly important, and the rail-road becomes eminently the superior method of communication. We are therefore led to the conclusion, that in regard to the cost of construction and maintenance, and also in reference to the expense of conveyance at moderate velocities, canals are clearly the most advantageous means of communication. On the other hand, where high velocities are required, as for the conveyance of passengers, and under some circumstances of competition, for light goods of great value, in proportion to their weight, the preference would be given to a rail-road.

It may be observed in favor of rail-roads, that they admit of advantageous use in districts where canals, for the want of water, would be impracticable. This advantage often occurs in mining districts, and sometimes for general trade, where it is necessary to cross dividing ridges at a level too high to obtain water for their summits.

The facts and reasonings presented, we believe clearly show, that both canals and rail-roads, are highly important means of internal communication; that each has its peculiar advantages, and will predominate according to the character of the route, and the trade for which it is intended to provide. . . .

COMPARISON OF RATES OF TRANSPORTATION

	Ton of 2,000 pounds	
	Price per ton per mile	Cost if carried 200 miles
	Cts. Mills	Dolls. Cts.
Prices of transportation during the years 1817, 1818, 1819, by teams, from Albany to Buffalo, (usual rates, $4.25 pr cwt.,)	29.3	$58 60
Rates of 1835, (including tolls,):		
By Erie Canal —		
For merchandize,	3.95	7 90
Flour,	1.83	3 66
Staves,	0.97	1 94
Salt,	0.93	1 86
Baltimore and Ohio Rail-Road —		
Down freight,	4.0	8 00
Up "	6.0	12 00
Liverpool and Manchester Rail-Road —		
For merchandize,	7.5	15 00
Hudson river, 145 miles —		
Heavy goods, (from N. Y. to Albany, 10 cts. per 100 lbs.)	1.38	2 76
Light " 20 " "	2.76	5 52
Provisions, &c.,7 " "	0.96	1 92
Lake Ontario —		
Merchandize, (from Oswego to Lewiston, 146 miles, 20 cts. pr 100 lbs. all kinds,)	2.74	5 48
Lake Erie —		
Merchandize, (from Buffalo to Cleaveland, 190 miles,		
23 cts. pr 100 lbs.) for heavy goods,	2.42	4 84
29 cts. pr 100 lbs. for light goods,	3.00	6 00

VIII. Progress and Development of Railroads

During the Decade, 1850–1860 [1]

The decade 1850–1860 saw rapid railroad development in the United States. Lines already in operation were extended and new ones were laid down. In addition the hauling capacity of the roads for both freight and passengers was materially increased.

The decade which terminated in 1860 was particularly distinguished by the progress of railroads in the United States. At its commencement the total extent in operation was 8,588.79 miles, costing $296,260,128; at its close, 30,598.77 miles, costing $1,134,452,909; the increase in mileage having been 22,004.08 miles, and in cost of construction $838,192,781.

While the increase in mileage was nearly 300 per cent., and the amount invested still greater, the consequences that have resulted from these works have been augmented in vastly greater ratio. Up to the commencement of the decade our railroads sustained only an unimportant relation to the internal commerce of the country. Nearly all the lines then in operation were local or isolated works, and neither in extent nor design had begun to be formed into that vast and connected system which, like a web, now covers every portion of our wide domain, enabling each work to contribute to the traffic and value of all, and supplying means of locomotion and a market, almost at his own door, for nearly every citizen of the United States.

Previous to the commencement of the last decade only one line of railroad had been completed between tide-water and the great interior basins of the country, the products of which now perform so important a part in our internal and foreign commerce. Even this line, formed by the several links that now compose the New York Central road, was restricted in the carriage of freight except on the payment of canal tolls, in addition to other charges for transportation, which restriction amounted to a virtual prohibition. The commerce resulting from our railroads consequently has been, with comparatively slight exceptions, a creation of the last decade.

The line next opened, and connecting the western system of lakes and rivers with tide-water, was that extending from Boston to Ogdensburg, composed of distinct links, the last of which was completed during 1850. The third was the New York and Erie, which was opened on the 22d of April, 1851. The fourth, in geographical order, was the Pennsylvania, which was completed in 1852, although its

[1] *Preliminary Report on the Eighth Census, 1860.* (Washington, 1862), 103–5.

mountain division was not opened till 1854. Previous to this time its summit was overcome by a series of inclined planes, with stationary engines, constructed by the State. The fifth great line, the Baltimore and Ohio, was opened, in 1853, still further south. The Tennessee river, a tributary of the Mississippi, was reached, in 1850, by the Western and Atlantic railroad of Georgia, and the Mississippi itself, by the Memphis and Charleston railroad, in 1859. In the extreme north the Atlantic and St. Lawrence, now known as the Grand Trunk, was completed early in 1853. In 1858, the Virginia system was extended to a connexion with the Memphis and Charleston and with the Nashville and Chattanooga railroads.

The eight great works named, connecting the interior with the seaboard, are the trunks or base lines upon which is erected the vast system that now overspreads the whole country. They serve as outlets to the interior for its products, which would have little or no commercial value without improved highways, the cost of transportation over which does not equal one-tenth that over ordinary roads. The works named, assisted by the Erie Canal, now afford ample means for the expeditious and cheap transportation of produce seeking eastern markets, and could, without being overtaxed, transport the entire surplus products of the interior.

Previous to 1850 by far the greater portion of railroads constructed were in the States bordering the Atlantic, and, as before remarked, were for the most part isolated lines, whose limited traffics were altogether local. Up to the date named, the internal commerce of the country was conducted almost entirely through *water* lines, natural and artificial, and over ordinary highways. The period of the settlement of California marks really the commencement of the new era in the physical progress of the United States. The vast quantities of gold it produced imparted new life and activity to every portion of the Union, particularly the western States, the people of which, at the commencement of 1850, were thoroughly aroused as to the value and importance of railroads. Each presented great facilities for the construction of such works, which promised to be almost equally productive. Enterprises were undertaken and speedily executed which have literally converted them into a net-work of lines, and secured their advantages to almost every farmer and producer.

. . . The only important line opened in the west, previous to 1850, was the one from Sandusky to Cincinnati, formed by the Mad River and Little Miami roads. But these pioneer works were rude, unsubstantial structures compared with the finished works of the pres-

ent day, and were employed almost wholly in the transportation of passengers. Within the decade, in place of this one line, railroads have been constructed radiating from lakes Erie and Michigan, striking the Mississippi at *ten* and the Ohio at *eight* different points, and serve as trunk lines between the two great hydrographic systems of the west. These trunk lines are cut every few miles by cross lines, which, in the States east of the Mississippi, are sufficiently numerous to meet every public and private want, and to afford every needful encouragement to the development of the resources of this country.

The southern States have been behind the northern in their public enterprises, though, at the date of the census, they were prosecuting them with great energy and vigor. The progress inland of the great trunk lines of the south has been already noted. The opening of the Mobile & Ohio, and of the Mississippi Central, which will soon take place, will give completeness to the system of the southwestern States, and leave little to be done to make it all that is wanted for that section of the country.

West of the Mississippi less has been done, for the reason that the settlements there are of a more recent date, and the people less able to provide the means for their construction than those of the older States. But even upon our western frontier extensive systems have been undertaken and very considerable progress made in their execution.

A more interesting subject than the progress of our public works would be their results, as shown in the increased commerce and wealth of the country. But such inquiries do not come within the scope of this report. It is well ascertained, however, that our railroads transport in the aggregate at least 850 tons of merchandise per annum to the mile of road in operation. Such a rate would give 26,000,000 tons as the total annual tonnage of railroads for the whole country. If we estimate the value of this tonnage at $150 per ton, the aggregate value of the whole would be $3,900,000,000. Vast as this commerce is, more than three-quarters of it has been created since 1850.

IX. Inland Water Commerce

Development, 1816–1852 [1]

By the middle of the century, the lake trade had developed to large proportions. River traffic, although important, was being gradually displaced by that of the railroads. This movement has been described as follows:

[1] *Report on the Trade and Commerce of the British North American Colonies and upon the Trade of the Great Lakes and Rivers.* By Israel D. Andrews (Washington, 1853), 55–6, 743–6, 904–6.

In 1816 the first steamer was built on the waters of Lake Ontario, and the first on Lake Erie in 1818. For some considerable time the first vessels put in commission on Lake Erie were used merely for facilitating the movements and operations of the Indian traders, carrying westward supplies and trinkets for the trade, and returning with cargoes of furs and peltries. In 1825 the Erie canal was completed, and its influence began at once to be felt through the western country. The western portion of the State of New York immediately began to assume an air of civilization and to advance in commercial growth. This influence continued still to increase until the Welland canal and the Ohio canals were completed. The tonnage, which had then increased to about 20,000 tons, found at this time full employment in carrying emigrants and their supplies westward, which continued to be their principal trade till 1835, when Ohio began to export breadstuffs and provisions to a small extent. In 1800 Ohio had 45,000 inhabitants; in 1810, 230,760; in 1820, 581,434; in 1830, 937,903.

During this year a portion of the canals was opened, and during the ten years next ensuing after 1830 some five hundred miles of canals had been completed, connecting the lakes by two lines with the Ohio. Under the influence of these improvements the population of the State augmented to 1,519,467 individuals. In 1835 she exported by the lakes the equivalent of 543,815 bushels of wheat. In 1840 her exports of the same article over the same waters were equivalent to 3,800,000 bushels of wheat, being an increase, in the space of five years, in the articles of wheat and flour, of what is equal to 3,300,000 bushels of wheat, or nearly six hundred per centum. These articles are selected, as being the most bulky, in order to illustrate the effect of canals upon lake commerce. At this period, 1840, there were not completed over two hundred miles of railway in the State, and this distance was composed of broken portions of roads, no entire route existing as yet across the length or breadth of the State. In 1850, there were in operation something over four hundred miles of railroad, and rather a greater length of canals, while the population had increased to 1,908,408, and her exports, by lake, of wheat and flour, were equivalent to 5,754,075 bushels of wheat, and that, too, in spite of the fact that the crop of 1849 was almost an absolute failure throughout the West.

In 1851 the exports of wheat and flour, by lake, were equivalent to no less than 12,193,202 bushels of wheat; and the cost of freight and shipping charges on this amount of produce falls little, if any,

short of $510,000; nearly the whole amount having reached the lakes via the canals and railways of Ohio. . . .

The history of the rise and progress of the steam-marine of the United States is one of the most interesting and wonderful things in our national advancement. Although one steamboat was built at Pittsburg as early as the year 1811, and although eleven other boats were built on the Ohio river and its headwaters within the next five years, it was not until the year 1817 that steam navigation could be said to have been fairly introduced upon the Mississippi and its tributaries. Previous to this year, there were twelve steamboats upon these waters, having an aggregate carrying capacity of 2,235 tons. From 1817 to 1834, the number of boats increased to 230, and the aggregate of tonnage to 39,000 tons. In 1842 there were 475 boats on the same waters: in 1851 this number had been increased to 601.

Official reports made to the Treasury Department in 1842, stated in detail the steamboat tonnage on the Mississippi and its tributaries in that year. The following table shows the increase from 1842 to 1851.

COMPARATIVE STATEMENT

Districts	Tonnage			
	1842	1851	Increase	Decrease
New Orleans	28,153	34,736	6,583	...
Saint Louis	14,725	31,834	17,109	...
Cincinnati	12,025	24,709	12,684	...
Pittsburg	10,107	16,943	6,836	...
Louisville	4,618	15,181	10,563	...
Nashville	3,810	3,578	.....	232
Wheeling	2,595	7,191	4,596	...
Vicksburg	.....	938	938	...
Memphis	.....	450	450	...
Total	76,033	135,560	59,759	232

The year following the real commencement of regular steamboat navigation on the waters of the Mississippi and its tributaries, (1817,) the first steamer employed on the upper lakes was built and launched on Lake Erie. In 1819 the waters of Lake Huron were first ploughed by the keel of a steamer, and in 1826 those of Lake Michigan. In 1832 a steamboat first appeared at Chicago, and in 1833 there were

but eleven small steamers on the three lakes named. This date may therefore be fairly taken as that of the real commencement of steamboat navigation on the upper lakes.

Ten years later (February, 1843) a report was made to Congress of the number and tonnage of steamboats employed on those waters, "from January 1, 1841, to January 1, 1843." Though this is a very loose way of stating a matter of this kind, and does not give the true amount of the steam tonnage enrolled and employed in either *one* of the two years included — necessarily overstating it — yet the facts thus presented are used for the purpose of comparing them with those now ascertained, as showing correctly the steam tonnage of the year which ended on the 30th June, 1851.

COMPARATIVE STATEMENT

Districts	Tonnage		
	1841-'43	1851	Increase
Buffalo creek	6,773	25,990	19,217
Presque Isle	2,813	5,691	2,878
Cuyahoga	1,855	6,418	4,563
Miami	887	1,745	858
Detroit	2,053	16,469	14,416
Mackinaw	.....	1,746	1,746
Chicago	.....	652	652
Total	14,381	58,711	44,330

These comparative statements show that in a period of nine years the steamboat tonnage of the Mississippi valley has nearly doubled itself, and that in a period of eight years that of the upper lakes has more than quadrupled itself: very significant facts touching increase of population, production, and trade.

The average size of steamboats now running on the lakes is found to be 437 tons; that of the steamboats of the Ohio basin $206\frac{3}{9}\frac{3}{5}$ tons; and that of those of the lower and upper Mississippi, the Arkansas, the Missouri, and the Illinois rivers, $273\frac{7}{9}\frac{4}{5}$. On the Mississippi and Ohio rivers there are many steamers of from 300 to 500 tons each, and a number from 600 to 800 each; but the large number of light-draught boats, built to run in periods of low water on those rivers, and in all seasons on the smaller streams emptying into them, carry

the general averages down to the figures given above. Several of the passenger steamers of the lakes are of eleven hundred tons and upwards each.

COMPARATIVE STATEMENT

	Number	Tonnage
		Tons and 95ths.
Northern lakes of the United States	164	69,165 87
Mississippi valley.....do	253	67,957 84
Ohio basin.....do	348	67,601 31
Total for interior of the United States	765	204,725 12

The cost of steamboats on the lakes and rivers of the interior, varies from eighty to ninety, and from ninety to one hundred dollars per ton. Taking the lowest price, which is that attainable in the Ohio basin, as the standard, we have as the original value of the 204,725$\frac{12}{95}$ tons of steam tonnage engaged in the transportation of passengers and the carrying trade on the lakes and rivers of the United States, for the year ending June 30, 1851, an aggregate of sixteen million three hundred and seventy-eight thousand dollars; an amount of capital that goes entirely out of existence, and has to be re-invested every three and a half to four years — the period of the "natural life" of a steamboat on the waters of the interior.

This fact indicates very clearly the immense extent of the employment provided and of the material consumed, in keeping up the steam tonnage of the United States to the standard required by the travel and trade of the country. . . .

The canal commerce of the United States is prosecuted upon about 3,000 miles of canal, which, excluding the coal trade, cleared and landed an average of about 6,000 tons per mile. The New York State canals averaged, in clearances and landings, about 9,000 tons per mile, but this is above the average for all the canals. At 6,000 tons per mile, 3,000 miles give 18,000,000 tons, valued at $66 the ton, and forming a gross sum of $1,188,000,000.

There are also completed in this country, 13,315 miles of railway; but as 2,500 miles have been opened since January 1, 1852, only 10,815 miles can be considered as having participated in the trade of 1852. Several of the longest freight lines have received and delivered an aggregate amounting to an average of 2,000 tons per mile; but

as many other lines do a comparatively light freighting business, the average assumed will be 1,000 tons per mile, or a gross business of 10,815,000 tons, which, from the general character of railway freight, as being of a lighter and more costly character than water freight, may be valued at $100 the ton: this would give an aggregate of gross railway commerce amounting to $1,081,500,000.

This is undoubtedly a very unsatisfactory way of computing the value of our domestic trade, but, until better data can be arrived at, the fairness of this statement cannot be denied; and it is only put forth as the nearest approximation that can be made to accuracy, under our present system of internal trade returns, in the hope that the startling results here obtained may arouse those interested in this important trade to a full investigation of the subject by the collection of authentic data.

It has been customary heretofore, in making up these or similar estimates, to call the net money-value of property one-half the gross amount. Though this process may correctly denote the number of tons transported, it will by no means decide that the same property has not entered and re-entered, several times, into the general account, as it moved from point to point in search of a consumer. For convenience, however, the following tabular statements, showing the gross and net tons and value, are presented:

1851	NET		GROSS	
	Tons	Value	Tons	Value
Lake commerce	1,985,563	$157,236,729	3,971,126	$314,473,458
River commerce	2,033,400	169,751,372	4,066,800	339,502,744
Aggregate	4,018,963	326,988,101	8,037,926	653,976,202

This commerce and its necessities have occasioned the construction in the United States of nearly twenty thousand miles of magnetic telegraph, at a cost of little less than $6,000,000.

Comment upon such facts as are here presented, will readily suggest themselves to the minds of all intelligent men. It will be seen that our domestic commerce is of incalculable value to us, even as represented by the "coasting" trade; but when to this is added the value of our whale, cod, and mackerel fisheries, and our California trade, that is carried on in registered bottoms, its magnitude will

be still more astonishing. The fact that our domestic exchanges amount, by sale and resale and by the additional value gained by the labor bestowed in transportation, sale, &c., annually to over *five thousand million dollars*, as the sum upon which one commission or profit is paid, and that in this trade is employed actively and profitably over *two million tons* of shipping, which cost not less than one hundred and twenty million dollars, three thousand miles of canal, thirteen thousand miles of railway, and twenty thousand miles of telegraph, costing about four hundred and fifty million dollars, is one calculated not only to astonish, but to excite admiration of the energy, industry, and enterprise which, in so short a period, have achieved this high position.

CHAPTER XIII

FOREIGN COMMERCE, 1800–1860

I. Foreign Commerce prior to 1860

A. *Character and Extent of Foreign Commerce, 1800–1860*[1]

During the sixty years from 1800 to 1860 the value of the export trade of the United States increased more than sixfold, from less than $50,000,000 to almost $300,000,000 annually. During the same period the value of the imports increased from less than $60,000,000 to more than $300,000,000 annually. The most important articles of export were cotton, tobacco, rice, flour and provisions. Of these exports, Great Britain took more than any other country. A view of the commerce of this period is given by Mr. Kettell as follows:

The imports rose steadily to over $300,000,000 in 1854, under the first Australian and Californian excitement, and took larger dimensions as the railroad operations progressed. Railroad iron figures largely in the amount in exchange for bonds. The imports of silks rose from $13,731,000, in 1850, to $30,636,000. The most remarkable rise in the importation was, however, in sugar, which, from $11,000,000, rose to nearly $55,000,000, in 1857, in consequence of the failure of the Louisiana crop, at a moment of very active demand. So high a figure to be paid for sugar at a critical moment went far to disturb the exchanges, and aid the panic of 1857. We find that the whole amount of importations for the ten years reached $3,004,591,285, exceeding, by $1,736,807,503, the importations of the previous ten years. This excess of expenditure corresponds with the estimated amount of capital expended for extraordinary purposes, since a considerable portion of the expenditures was applied to domestic manufactures. The operation of the treaty with Canada produced a somewhat larger receipt of foreign goods. These also swelled proportionately the aggregate imports. The excitement manifest in the United States in regard to gold and railroads, was also present in England and Europe. The production of manufactured wares to send to the gold countries, and to avail of the local demand for goods, required more raw material, at a moment when the short harvests and war enterprise enhanced general wants. The effect of these was

[1] *Eighty Years' Progress.* By Thomas P. Kettell (Hartford, 1869), 156–9.

equivalent to a large transfer of capital to the west, not only from Europe, but also from those eastern states that are usually buyers of food. Thus the wheat crop of the United States in 1850, by census, was equal to 22,000,000 bbls. of flour. The average export price in that year was $5, giving to the crop a value of $110,000,000. In 1855, the average price was $10, giving a value of $110,000,000 greater. This sum was taken out of the pockets of the food buyers, to the profit of the food sellers, at the moment when the latter were enjoying so large an expenditure for other purposes. The export value of agriculture rose from $24,309,210, in 1850, to $77,686,455, in 1856. The great activity of the years ending with 1857 was, then, due to heavy expenditure of capital at the west simultaneously with profitable sales of its crops. . . .

If we bring together by recapitulation the aggregate of the seven decades since the formation of the government, we shall have a very interesting synopsis of the national progress in respect of commerce, . . . as follows:

EXPORTS FOR PERIODS OF TEN YEARS

Year	Domestic	Foreign	Total
1800	$293,634,645	$191,344,293	$484,968,938
1810	383,401,077	372,536,294	755,937,371
1820	462,701,288	127,190,714	589,892,002
1830	536,104,918	229,643,834	765,748,752
1840	892,889,909	199,451,994	1,092,351,903
1850	1,131,458,801	129,105,782	1,260,564,583
1860	2,766,799,881	226,950,036	2,993,749,917
	$6,466,990,519	$1,476,222,947	$7,943,203,466

Year	Imports	Manufactures, Annual Value	Agriculture, Annual Value
1800	$591,845,454	.....	.....
1810	927,663,500	145,385,906	.....
1820	688,120,347	62,766,385	.....
1830	798,633,427	111,645,466	.....
1840	1,302,476,084	483,278,215	$621,163,977
1850	1,267,783,782	1,055,595,899	994,093,842
1860	3,004,591,285	2,000,000,000	1,910,000,000
	$8,581,113,879	.....	.....

This table, mostly official, gives the extraordinary results of a nation's industry and commerce in a period of seventy years. The growth has such an accumulative force, as to be very surprising. In the item of re-exports of foreign goods, the trade never recovered the figures they touched at the period when American vessels did the carrying trade for fighting Europe. Latterly, however, under the warehouse system of the United States, and the reciprocity treaty with the British provinces, some increase in that respect has taken place, the more so that steam and extended relations are opening to the United States a larger share of the South American trade, tending ultimately to give the United States the preponderating influence. The exports of domestic goods grow rapidly under the more extended demand for cotton throughout the world, and of which the United States is the only source of supply. All other cotton countries, India particularly, require more cotton in the shape of goods than they supply in the raw state. The demand for cotton clothing increases in the double ratio of greater numbers and greater wealth throughout the world. Cotton is, however, not the only article which increases in export value. The tables show us that gold has figured in ten years for $507,000,000 as an article of export, and will probably never be less. The agricultural resources of this country have just begun to be developed. Up to 1842 there was, under the restrictive systems of Europe, comparatively no market for American farm produce. In that year the statesmen of England recognized the fact that the demands of English work people for food had outgrown the ability of the British islands to supply it on terms as low as it could be bought elsewhere. They therefore removed the prohibition upon the import of cattle and provisions, and reduced the duty on grain. This opened a market for American produce, which grew rapidly. The circumstances of the famine of 1846 justified the wisdom of the English government, and led to the entire removal of the corn duties in 1849. That example was followed by France and her neighbors. France, however, restored the duties in 1859. The liberal legislation of England, the famine, the wars, and speculations of Europe, have gradually extended the demand for American produce, at the time when a very broad field had been opened to supply that demand. This we may illustrate. The area of Great Britain's industry — hills, lakes, vales, and valleys — is 53,760,000 acres; and the population in 1812, when she made war on us, was 11,991,107. Now we find from the table of land sales, elsewhere given, that the federal government has sold in the last twenty years selected farm lands to the extent of 68,655,203

acres, and has given to railroads 42,000,000 acres more of selected lands, making 110,000,000 acres that have mostly passed into the hands of settlers. This is a surface double the whole area of Great Britain; and the population on that area has increased, in the same time, 11,374,595, or a number nearly as large as that of Great Britain in 1812. There have been built on that area in the last ten years, and are now in operation, 20,000 miles of railroads, crossing every part of it, and bringing every farm within reach of a market. The speculators and road builders, who ate up the produce of that area, during the process of road construction, have vanished, and the whole is now offered by a hundred channels to the best bidders of Europe. We have said that corn is the settler's capital, and that corn, in the shape of grain, pork, and whiskey, is the staple export of a new country. The corn product of 1855, per state reports, was 600,000,000 bushels. The number of hogs packed that year was 2,489,050, averaging 200 lbs. each, and giving a total weight of 497,900,000 lbs. of pork. In that year the weight of pork exported was 164,374,681 lbs. Of this amount, 58,526,683 lbs. went to England, or 12 per cent. of the whole production, as the result of her more liberal policy of 1842.

QUANTITIES OF CORN AND PORK EXPORTED TO GREAT BRITAIN

	Pork, barrels	Hams and Bacon, lbs.	Lard, lbs.	Corn, bushels	Wheat, bushels	Flour, barrels
1840	.....	1,061	.....	104,341	615,972	620,919
1841	4,769	26,394	444,305	12,548	119,854	208,984
1842	6,900	160,274	3,430,732	123,665	143,300	208,024
1847	73,940	14,367,105	17,798,770	15,526,525	4,399,951	2,457,076
1848	87,760	29,218,462	27,283,741	5,062,220	2,034,704	958,744
1849	111,385	53,150,465	21,388,265	12,392,242	608,661	953,815
1855	64,663	30,240,161	15,349,922	5,935,284	8,036,665	2,026,121
1858	13,578	15,365,524	10,288,474	3,215,198	8,926,196	3,512,169

The cotton, tobacco, and rice of the south, the farm produce of the west, and the gold of California, each contributed an increasing proportion to the general exports; but manufacturers have also come to figure largely in the general aggregate.

The following table gives the proportions in which the general heads of exports have contributed from time to time to the result, since the formation of the government; and also the total exports, including all articles.

HEADS OF EXPORTS

	Cotton	Tobacco and Rice	Flour and Provisions	Manufactures	United States Specie	Total of all Domestic Exports
1790.....	$42,285	$6,103,363	$5,991,171	.....	.....	$19,666,000
1803.....	7,920,000	8,664,000	15,0<0,000	$2,000,000	.....	42,205,961
1807.....	14,232,000	7,783,000	15,706,000	2,309,000	.....	48,699,592
1816.....	24,106,000	15,187,880	20,587,376	2,331,000	.....	64,781,896
1821.....	20,157,484	7,143,349	12,341,360	2,752,631	$10,478,059	43,671,894
1831.....	31,724,682	6,908,655	12,424,701	5,086,890	9,014,931	61,277,057
1836.....	71,284,925	12,607,390	9,588,359	6,107,528	345,738	106,916,680
1842.....	47,593,464	11,448,142	16,902,876	7,102,101	11,720,77	92,969,996
1847.....	53,415,848	10,848,982	68,701,921	10,351,364	2,620	150,637,464
1851.....	112,315,317	11,390,148	21 948,651	20,136,967	18,069,580	196,689,718
1854.....	93,596,220	12,182,204	65,941,323	26,849,411	38,234,566	253,390,870
1859.....	161,424,923	23,281,186	37,987,395	32,471,927	60,110,000	335,894,385

These general heads represent all parts of the Union — cotton and tobacco in the south, flour and provisions in the west, manufactures in the east, and gold in the Pacific States. It is difficult to see any great difference in the prosperity which may attend each in the future. The south is most secure in its market, holding, as it does, an absolute monopoly of a raw material, which is indispensable to the industry of 5,000,000 people at home and abroad, without which $500,000,000 employed in manufactures would be valueless, and without which a large portion of the clothing of civilized men would fall short. The peril of this position to manufacturers, operatives, and merchants is apparent to statesmen, and the utmost efforts are vainly made to find a remedy. The greater the exertion used, the more dependent are the manufacturers on the south. India was long the hope of England, but there are 120,000,000 persons in India whose scanty hand-spun clothing is composed of cotton. Every effort to improve their condition, and to induce a larger culture of cotton, has but one result — viz.: to create a larger demand for cotton *machine* clothing from them; and the dependence upon the United States is the greater. The import of cotton from India has been the cry for thirty years. What is the result? English official returns give the following figures for 1859: —

	lbs.
Import of raw cotton from India, 1859.....	192,330,880
Export of cotton goods to India, 1859.....	193,603,270
Excess of cotton sent to India.....	1,272,390

The field for the extension of the machine goods in China and India is limited only by the means of the people to buy. The more those means are increased, the greater is the demand for the raw material; and the value of cotton rises annually on that basis. The productions of the west are more exposed to rivalry than those of the south; but since the formation of the present government, England and western Europe, from being large food exporters, have come, by the growth of manufactures, to be large food importers, and their supplies are drawn more steadily from eastern Europe. Those resources are coming to be narrowed, for the same reason. The United States, on the other hand, with their immense plains and growing mean of communication, are assuming a more regular position as a source of supply, which will annually swell the exports. The column of manufactures is a gratifying evidence that the colonial position is at last overcome; that the requisite skill and capital for manufacturing against all rivalry are at last acquired, and that American industry now finds sale in the markets of the world. The South American countries offer the legitimate opening for that sale. The gold of California is always a merchantable commodity, and must sell under all circumstances. . . .

B. *Commerce and Legislation, 1806–1854*[1]

The foreign commerce of any country depends largely on the encouragement it receives at the hands of the lawmakers both in its own and in foreign countries. Thus the hostile legislation of Great Britain by Orders in Council and of Napoleon by his Decrees, tended to decrease the commerce of the United States early in the century. On the other hand, commercial treaties entered into by this country with foreign nations stimulated the growth of the commerce and trade of the United States.

On the conquest of Prussia, in 1806, Bonaparte conceived the idea of crushing the maritime power of Britain, by prohibiting all the world, in his famous Berlin Decree, from conducting any trade with her or her numerous dependencies. The retaliatory British Orders in Council followed at once, and all countries in the world connected in any way with France, or opposed to England, were declared to be under precisely the same restraints as if actually invested in strict blockade by British forces. Incensed by so unexpected and ruinous a measure, Napoleon issued the memorable Milan Decree, making

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[1] *An Historical and Statistical Account of the Foreign Commerce of the United States.* By J. Smith Homans (New York, 1857), 61–3.

lawful prize of all vessels submitting at any time or in any way to British search or taxation. It was natural that these illegal and unauthorized proceedings should excite the utmost interest and concern of the United States so materially and even vitally affected by them. We protested in vain. The administration recommended as the sole remaining alternative of peace an embargo, which Congress adopted in 1807. This measure the commercial interests warmly opposed as ruinous to them, and memorials were forwarded from many quarters praying for its repeal. To these it was replied by government, "The embargo, by teaching foreign nations the value of American commerce and productions, will inspire them with a disposition to practice justice. They depend upon this country for articles of first necessity, and for raw materials to supply their manufactures." Such a view of the matter, however, did not occur to the mind of Napoleon, who regarded the embargo as greatly favorable to France, and aiding him in his warfare against English commerce. "To submit," said he to Mr. Livingston, "to pay England the tribute she demands, would be for America to aid her against him, and a just ground of war."

In 1809, a non-intercourse with Britain and France was substituted for the embargo, which the latter power regarded as such an evidence of hostility as to justify her in proceeding at once to condemn millions of American property as lawful prize.

The Congress of 1810 determined upon the admission of the commercial vessels of the powers above-named, if the act were preceded by a revocation of their hostile and arrogant decrees. The French government pretended to close in at once with the proposal, but it was nearly one year later before her repealing ordinance was officially promulgated, evidencing a disposition on the part of Napoleon to play with us in bad faith, and to turn the game at any time to his advantage — so humiliating to our pride are the events of this entire era. With England it was long doubtful what relationship we might expect to sustain. Hostile and peaceable alternately, according to her caprices or her interests, she had provoked in American minds a resentment too deep to be subdued, and forbearance longer was regarded a crime. The Orders of Council remaining in force, and the aggressions increasing daily, a non-intercourse act of sixty days was resorted to, the prelude only to a solemn declaration of war. Then was the hour of severe retribution, and then was the national honor and dignity of America triumphantly vindicated!

Commerce of the United States since 1812. — This has been an era of prosperity and rapid advance, and the great powers of the civilized

world seem to have realized for once the rich benefits of a prolonged armistice, or, if another expression be preferred, a protracted, and we hope permanent peace. In commercial rank, the United States of America, subordinate to Britain only, and having outstripped all the world else, is prepared to share a divided scepter, until that scepter can be wielded alone by her hand, and the empire of the seas be transferred to her keeping.

. . . The period [1812–1854] has been celebrated by an approach to a more liberal internationality, and a reciprocity something else than in name. The progress in the last ten years has been most strongly marked toward that *ultimatum*, in the minds of every lover of truth and human advancement, perceived first by Lord Bacon, and ably, though imperfectly, presented by his followers: commerce unfettered as the winds that waft it; free religion, free government, free press, free traffic — freedom everywhere, and in every righteous thing throughout all the world! When shall nations sacrifice their foolish jealousies, and meet each other on this high, broad, and Christian ground? We are no partisan here, but a cosmopolite. We advocate a policy as wide as the earth, and as generous. No single nation can afford to act alone; the movement, if made at all, must be universal.

The condition of Europe now, however, argues little for the early triumph of those principles to which we have been referring. The latest British, French, and Austrian tariffs have been less restrictive, and in the case of the first-named nation her policy would appear about to be radically changed. The German States maintain the exclusive policy, as do also the Spaniards and Portuguese. Russia was the latest in adopting the restrictive system, but we see by her last tariff some evidences of improvement, which neither Sweden nor Denmark furnishes. The duties of the Italian States have been generally moderate, except for Rome and Naples, and we recognize a great improvement in these in the tariff of his Holiness the Pope. The commercial system of Holland is the most liberal in all Europe, but the South American States appear to be governed by the same spirit as that which dictated the policy of Spain.

In 1824, Great Britain seemed desirous of removing in some degree her restriction upon the navigation of other powers. She entered into reciprocity treaties with many of them, and in this was soon after imitated by the United States, in the treaties of 1825–6–8–9 with Central America, Denmark, Sweden, Hanse Towns, Prussia, Brazil, Austria, Hungary and Bohemia, Mexico, Russia, Venezuela,

Greece, Sardinia, Netherlands, Hanover, and Portugal. We also entered into similar but limited reciprocity treaties with France in 1822, continued afterward, and with England in 1821, 1825, and 1833, and a full reciprocity treaty with Canada in 1854. These treaties were arranged by Mr. Kennedy, chairman of the Committee of Commerce, into three classes.

1. Those securing mutual privileges of export and import of produce, the growth, produce, or manufacture of the stipulating powers, transported in their own vessels, without discrimination on tonnage.

2. Those providing for a levy of duties not less favorable upon the tonnage of either than are levied upon the tonnage of other powers.

3. Those requiring equality of port charges. . . .

II. Foreign Commerce of the North and South Compared

A. *Predominance of the South in the Export Trade, 1800–1850* [1]

The value of agricultural exports from the two sections of the country from 1800 to 1850 were as follows:

Statement in millions of dollars, of the value of the produce of the Southern slave States (those below the 35th degree of latitude) and the value of the produce of the free States and of the Northern slave States, exported annually on an average from the United States, during the undermentioned years, and the amount to each person.

	Southern Slave States.		Free States & N. Slave States	
1800 to 1807.....	$9 millions,	$16 to each.	$30 millions,	$6 to each.
1820 to 1824.....	23½ "	19 "	23½ "	2¾ "
1830 to 1833.....	33 "	17 "	30½ "	2¾ "
1835 to 1840.....	66 "	26 "	36 "	2⅔ "
1841 to 1842.....	53 "	19 "	45 "	3 "
1844 to 1846.....	51½ "	17 "	48½ "	3 "
1849 to 1850.....	71¾ "	18 "	61½ "	3¼ "

What a flattering prospect for the future, the foregoing tables present to the producers of flour, wheat, Indian corn, tobacco, lumber,

[1] *Essays on the Progress of Nations.* By Ezra C. Seaman (New York, 1852), 390–1.

pork, beef, butter, cheese, and other provisions, in case they depend upon foreign markets for the sale of their products, to enable them to pay for, and clothe themselves with, British and French goods. It should be borne in mind also, that more than half of the exports of the free States, are to the West Indies, Brazil and other parts of South America, to pay for sugar, coffee, spices, tropical fruits and hides. The West Indies and Brazil, furnish a constant and regular demand and steady markets for the products of the free and northern slave states, while the markets of Europe are very uncertain, and not to be depended upon. The whole commerce of the United States with the West India Islands, and with the American continent and all its islands, is advantageous, the balance of trade being slightly in favor of our country, which is paid in coin, amounting on an average to four or five millions a year, the greater part of which is exported to the old world, to pay the balance of trade against us.

The products of the free and northern Slave States exported to the West Indies, and to the American Continent and its islands, amounted in 1844 to over twenty-three millions of dollars, and in 1850 to about twenty-eight millions of dollars; in payment for which we received some coin, and many articles of prime necessity, some of which cannot be produced in the United States, and others cannot be produced in sufficient quantities, for the consumption of the country.

The imports into the United States from the old world, which were retained for consumption (consisting mostly of manufactured products) cost in 1844, about seventy millions of dollars, and in 1850 about one hundred and thirty millions, about five sixths of which were consumed in the free and the northern slave states, while the domestic products of those states, taken by the old world in payment, amounted to only about twenty-eight millions of dollars in 1844, and thirty millions in 1850. It is easy to see that such a commerce is very disadvantageous to the northern states, as it makes them not only dependent upon, and tributary to the manufacturing nations of Europe, and involves them in debt, but it also makes them dependent upon, and tributary to the cotton planting states of the south, for cotton as an article of export, to pay their debts to foreign manufacturers.

B. *Small Import Trade of the South in 1855*[1]

Although the south furnished the most important articles of export, that section imported little directly from foreign nations. The money received for cotton,

[1] *Thirty Years' View.* By Thomas H. Benton (New York, 1854–6), II, 131–3.

ports in 1818, 1819, and 1820, amounted to $232,115,323; our imports during that period are estimated at $283,325,000; and if we add 20 per cent. to our exports for freight and profits, and call our foreign debt at the close of the war $30,000,000, calculating interest upon it, our aggregate foreign debt, including American stocks held by Europeans, would amount on the 30th day of September, 1820, to about $126,000,000; perhaps sixteen millions of it was lost by the failure and bankruptcy of American merchants and importers; leaving $110,000,000, which has been paid.

All the money and products sent abroad to pay the interest on our foreign debt, and the dividends on our stocks held abroad, appear as part of our exports; and the proceeds of all loans, and moneys and effects sent here to be invested in our stocks, appear in and as a part of our imports. Foreign debt, including the amount of our stocks held by Europeans on the first day of October, 1820, exclusive of sixteen million dollars due from bankrupts, estimated at $110,000,000.

Statement in millions of dollars, of the value of imports into the United States during the undermentioned fiscal years of coin and bullion, other free goods, dutiable goods, and the amount of duties collected during each period.

Years	Coin and Bullion, Millions	Free Goods, Millions	Dutiable Goods	Total Imported	Duties Collected, Millions
1821 to 1824.....	$24.9	$13	$265	$303.9	$90.4
1825 to 1828.....	28.7	19.1	301.5	349.3	115
1829 to 1832.....	23.7	23.5	297.4	349.6	124
1833 to 1834.....	25	75.8	133.8	234.6	43.1
1835 to 1837.....	37	202.3	241.6	480.9	74.8
1838.....	17.7	43.1	52.9	113.7	19.7
1839.....	5.6	70.8	85.6	162	25.5
1840 to 1842.....	17.9	135.9	181.4	335.2	51.6
1843 to 1846.....	36	71.2	304.8	412	97.1
1847.....	24.1	17.6	105.5	147.2	23.7
1848 to 1850.....	17.6	50.2	413.2	481	99.8

The tariff act of 1832 exempted from duty all teas imported in American vessels from China and other places beyond the Cape of Good Hope, coffee, spices, fruits, nuts, gums, dyewoods, and nearly all other raw products of the torrid zone, except sugar, and reduced

the duties on manufactures of silk, to a rate of from five to ten per cent.

The compromise act of 1833 provided for a prospective periodical reduction of duties until they should be reduced after the 30th of June, 1842, to 20 per cent., added greatly to the free list, and exempted from duty nearly all the manufactures of silk, worsted, silk and worsted, linen, and laces imported from Europe after the year 1833.

Under these acts the value of the goods imported free of duty, increased immensely, as shown by the foregoing table. The manufacturers of silk worsted, silk and worsted, linen, laces, and sheeting, imported free of duty in 1839, were valued at over thirty-six million dollars. These heavy imports of articles of luxury contributed to increase the balance of trade against the country, and to involve it in debt.

The imports into the United States in 1841 exclusive of specie were valued at $122,957,544; in 1842 they amounted to only $96,075,071. Perhaps nothing but embarrassments, inability to pay promptly our foreign debts, and the interest upon them, and the low state of American credit abroad, prevented the imports in 1842 from amounting to as much as they did in 1839 and 1841. About two thirds in value of the imports then consisted, and now consist, of manufactured products and metals, the greatest part of which might and ought to be produced in the United States. The effect of the tariff of 1842 was to lessen, by means of increased duties, the importation of articles of luxury, such as silks, satins, laces, wines, and distilled spirits, as well as iron, hardware, and manufactures of cotton, wool, worsted, and linen. It contributed to promote the interest of the country in several modes. 1st. By increasing domestic industry. 2d. By turning the balance of trade in favor of the country and contributing to relieve it from foreign debts and embarrassments. 3d. By increasing the revenue, and 4th by checking luxury. The compromise act of 1833 produced opposite effects in the long run, in all these particulars, and contributed to paralyze the industry of the country, and to impoverish it. Such are the effects also of the tariff of 1846, and the longer it is continued in force the more plainly they will be developed.

IV. Ocean Steam Navigation

Development between 1818 and 1840[1]

The most important event in ocean navigation during the nineteenth century was the application of steam as a motive power. As a consequence the carrying capacity for freight and the comforts of travel were increased.

No peaceful event of modern times has excited a greater interest in this country and Europe, than the establishment of regular steam communication between the opposite shores of the Atlantic. The experiment, at first denounced as visionary, and which one of the greatest mechanical philosophers of England, even within the last four years, demonstrated to be impossible, has been fairly and fully tried, and its success is no longer a question of doubt anywhere. That trackless waste of waters, which, by the populous eastern world, during the first fifteen hundred years of the Christian era, was regarded as illimitable, or as leading only to "that bourne from whence no traveller returns," has become the grand highway of nations. The distance which Columbus, in his first voyage, was seventy days in accomplishing, from Palos to San Salvador, and which the Plymouth pilgrims, one hundred and twenty years after him, were sixty-five days in traversing from Plymouth to Cape Cod, *is now accomplished in less than thirteen days!* The energy and skill of our countrymen had carried the science of ship-building to the highest perfection; and it may be doubted whether greater safety, speed, beauty, and accommodation can be devised by human ingenuity, than are combined in the splendid lines of packet-ships, which ply between New York and Liverpool, and London and New York. But, upon a calculation of ten years, the average passage of sailing-vessels from Liverpool to New York, is found to be thirty-six days, and from New York to Liverpool, twenty-four. The average passage of the packets during 1839, was less, the outward being only twenty-two and a half days, and the homeward passage thirty-three days and seventeen hours. The shortest outward was made in eighteen days and the shortest return passage in twenty-two. The establishment of the two great lines of steamships which now ply between London, Liverpool, Bristol, and New York, and between Liverpool and Boston, via Halifax, reduces the passage across the Atlantic, to an average of about thirteen days!

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[1] *Hunt's Merchants' Magazine* (New York, 1840), III, 296–9, 304.

A new era has indeed commenced. Enterprise and skill, called into active being by the wealth of Great Britain, have brought distant nations into neighborhood, opened new sources of prosperity, and added new ties to those bonds of national friendship and commercial interest, which have hitherto existed between this and the fatherland. Events of such importance are entitled to something more than a mere passing commentary.

While it is conceded that the British have been the first to demonstrate the superior safety of their steamers on the sea, the Americans were the first to accomplish the passage of the Atlantic by steam power. Fulton, at his death, left unfinished a steam-vessel, intended for St. Petersburgh, where the Russian government had offered him and his associates high privileges, in case of its arrival before a certain period. The vessel was finished and fitted for sea, but from some unforeseen cause, the enterprise was suddenly abandoned. Other parties, however, took it up, and on the twenty-second of August, 1818, the steamship Savannah was launched at New York. She was built by Francis Fickett, under the superintendence of Captain Moses Rogers, could carry no more than seventy-five tons of coal, and a small quantity of wood, and was therefore fitted not only with an engine, but with masts and sails, with the design only to make use of the engine on her European passage, when the wind prevented her laying her course. Having completed his vessel, Captain Rogers proceeded to Savannah, in May, 1819, and on the 25th of that month sailed for Liverpool, where he came to anchor on the 20th of June, in 26 days from Savannah. From Liverpool, on the 23d of July, the Savannah proceeded around Scotland to the Baltic, then up that sea for St. Petersburgh, and on the 9th of September, moored off Cronstadt. She left Cronstadt on the 6th of October, and on the 30th of November, anchored off Savannah, having, on her return voyage, stopped four days at Arendall, in Norway. During the whole of this period, she met with no accident, except the loss of a small boat and anchors. She made two voyages to Europe. At Stockholm, she was visited by Bernadotte, king of Sweden, who presented Captain Rogers with a "stone and muller," as a token of his gratification at the success of the enterprise. At St. Petersburgh, Captain Rogers received from the Emperor Alexander a present of a silver tea-kettle, as a token of his gratification at the first attempt to cross the Atlantic by steam. At Constantinople, Captain Rogers also received complimentary presents from the Sultan.

During the year 1819, a vessel, rigged as a ship, and provided with an engine, was built at New York, for the purpose of plying as a packet between New York and Charleston, Cuba and New Orleans. The experiment, so far as speed and safety were concerned, was entirely successful, but failing to pay expenses, was of necessity abandoned.

The idea of establishing a regular steam communication between New York and Liverpool had now come to be seriously entertained by some of the sagacious and enterprising, on both sides of the Atlantic. The voyages of the British steamer Enterprise, in 1825, to the East Indies, by means similar to those used by the Savannah, seems to have settled the question in the minds of the English public, as to the superiority of ocean steam navigation, provided ships could be so constructed as to carry a sufficient quantity of fuel. . . .

We do not feel called upon here to discuss the question, whether the "Great Western Steamship Company," or the "British and American Steam Navigation Company," are entitled to the credit — and an honorable distinction it certainly is — of *leading the way* in this great enterprise. . . . The Bristol company were indeed first upon the line with their noble ship, the Great Western; but the London and New York company were actually first to accomplish the passage through by steam with the Sirius, chartered for the express purpose. To the unwearied perseverance of Mr. Junius Smith, an opulent and distinguished American merchant in London, more than to any other individual, is the final and successful accomplishment of this great enterprise doubtless to be attributed. From January, 1833, to the present moment, he has been enthusiastically devoted to the object. As early as June, 1835, he published his first prospectus of a line of steam packets between England and America. The public were at first disposed to ridicule the project. Nothing daunted, he persevered, and in November following, issued a second prospectus, which began to attract the attention of capitalists. Shares were subscribed, doubt yielded to demonstration, the requisite capital was soon provided, and the "British and American Steam Navigation Company" was organized on a solid foundation. In October, 1836, they made their contract for building their first steamship; the keel was laid on the 1st of April, 1837, but owing to the failure of one of the contractors, and other difficulties, she was not launched until the 24th of May, 1838, when she received the name of the *British Queen*. She left Portsmouth on the 12th of July, 1839, on her first trip to New York, and arrived at New York on the 27th, after a passage of fourteen days and eighteen hours.

No sooner did the fact of the establishment of the British and American company transpire, than the people of Bristol became aroused to the importance of securing to their ancient city the advantages of a steam communication with New York. Mr. Brunel, the celebrated engineer, and other gentlemen connected with the great western railway, came forward with liberal subscriptions. A committee was appointed, assisted by one of the most competent practical ship-builders of the kingdom, to make the necessary surveys and examination. Their report was made to the subscribers on the 1st of January, 1836, and on the 2d of June, 1836, the "Great Western Steamship Company" was established by deed of settlement. On the 28th of July following, the stern-post of the Great Western was raised, and on the 19th of July, 1837, she was launched. After testing the working of her machinery, she departed from Bristol on the 8th of April, 1838, for New York, arriving at this port 23d of April, after a passage of fourteen days, twelve hours. She had made fifteen trips across the Atlantic before the British Queen was placed upon the line.

The "Trans-Atlantic Steamship Company," formed at Liverpool, in the summer of 1838, put two steamers on the route between that port and New York. The Royal William sailed on the 5th of July, and arrived the 24th, making a passage of eighteen days, twelve hours. The Liverpool sailed on the 6th of November, and arrived the 23d, making the passage in sixteen days, twelve hours. The Royal William was withdrawn from the route in the winter of 1838, and the Liverpool in 1839.

Public attention in London and in New England was soon directed to the establishment of a line of steamers to ply between Boston and Liverpool; and in 1839, Mr. Samuel Cunard, a citizen of London, succeeded in effecting a contract with the British government, for the transmission of her majesty's North American mails, twice a month from Liverpool, via Halifax to Quebec. The liberal sum of £60,000 per annum for seven years, is to be paid by the government for this service. Four steamships are to be placed on this line — two of which, the Britannia and Acadia, have already made their appearance. The citizens of Boston have aided the enterprise with a spirit and liberality honorable to their character, and with a keen perception of its importance to their flourishing city. The Unicorn, the first steamship from *Old* England to *New* England, arrived at Boston on the 3d of June. She did not belong to the line, and her voyage was experimental. She made the passage in seventeen days from Liverpool to Boston. The Britannia, the first of the regular line,

arrived at Boston on the 18th of July, in fourteen days from Liverpool; and the Acadia, which left Liverpool the 4th of August, arrived at Boston on the 17th, making the passage in twelve days, twelve hours — being the *shortest ever made from England to the United States.*

On the same day when the Acadia arrived at Boston, the President came up the harbor of New York. The day was fine, and the spectacle one rarely ever excelled. This magnificent steamship — the largest in the world — belongs to the British and American Steam Navigation Company, and is to ply alternately with the British Queen, in the same line. The President was launched on the Thames, on the 9th of December last, and in the perfection of her model, style of architecture, and beauty of finish, is unequalled perhaps by any other ship that floats upon the deep. . . .

The effects on the commerce and prosperity of the United States, which must follow the establishment of these lines of steam-packets, cannot fail to be important. The certainty and despatch with which their voyages are performed, will turn an immense amount of business into new channels, and multitudes, who have hitherto transacted their business abroad, through agencies and correspondents, will now cross and re-cross the Atlantic, as many times a year, perchance, with as little deliberation, as formerly attended their journeys from Maine to New York, or from New York to New Orleans. As an illustration of the advantages offered, not only to the city, but the interior and remote sections of country, connected by railways and river-steamers with the commercial marts, the fact may be stated, that a person at Chicago, in Illinois, 1200 miles from New York, may, by means of existing steam accommodations, actually reach Liverpool or London, in nineteen days from Chicago! The Journal of Commerce recently furnished another illustration of the advantages to be derived from the increased facility of communication, and despatch of merchandise. An order was sent from New York to England on the first of July. The goods were bought in London, sent to Bristol by land, reached here, were sold, and the proceeds remitted back by the Great Western, and would probably be in London about September 1st. So these three crossings of the Atlantic, with the transaction of the business, and eleven days lost by delays in waiting for the steamers to start, will all consume but two months. It is probable that letters sent from Liverpool by the Acadia will receive answers by the Great Western in just about twenty-five days. Money employed in the traffic between Europe and America can now perform about four times as many operations as it could

two years ago. The profits on each operation may be reduced, but there will be greater certainty and stability in the markets. . . .

V. The Carrying Trade

The Use of American and Foreign Vessels, 1821–1860 [1]

Prior to the Civil War, more than a half of the foreign commerce of the United States was carried in American vessels. If this commerce be measured in dollars it is found that the percentage of it carried in American vessels varied from 92.3 in 1826 to 66.5 in 1860. The extent of this foreign commerce and its gradual shifting from American to foreign vessels may be seen in yet another way. In 1825 but 9 per cent of the tonnage of vessels entering and clearing in the foreign trade of this country was foreign, while in 1850 it was 40 per cent.

1. FOREIGN CARRYING TRADE OF THE UNITED STATES, 1821–1860.

Year	In American Vessels	In Foreign Vessels	Per Cent Carried in American Vessels
1821	$113,201,462	$ 14,358,235	88.7
1825	180,702,261	15,173,202	92.3
1830	129,918,458	14,447,970	89.9
1835	229,424,056	42,165,263	84.5
1840	198,424,609	40,802,856	82.9
1845	189,380,923	42,520,247	81.7
1850	239,272,084	90,764,954	72.5
1855	405,485,462	131,139,904	75.6
1860	507,247,757	255,040,793	66.5

2. TONNAGE OF AMERICAN AND FOREIGN VESSELS ENTERED AND CLEARED IN THE FOREIGN TRADE OF THE UNITED STATES, 1821–1860.

Year	American	Per Cent	Foreign	Per Cent.
1821	1,570,045	90	164,604	10
1825	1,841,120	91	188,007	9
1830	1,938,987	88	265,336	12
1835	2,753,270	68	1,280,134	32
1840	3,223,955	69	1,418,849	31
1845	4,089,463	69	1,840,838	31
1850	5,205,804	60	3,503,837	40
1855	7,930,373	65	4,194,270	35
1860	12,087,209	71	4,977,916	29

[1] *Annual Report of the Commissioner of Navigation, 1912* (Washington, 1912), 193–5.

VI. The Foreign Commerce of Important Ports

A. *Foreign Commerce of the City of New York in 1859* [1]

Of all the American ports in 1860, New York was the most important. The extent of the trade of that city is shown by the following:

The year 1859 has been marked by no extraordinary events of a commercial character. The country appears to be recovering from the revulsion of the year 1857, and the long series of disasters and losses which followed. The business of the port of New-York for the year shows a favorable reaction from the extreme dullness of the year 1858. Its foreign exports having reached one hundred and thirty-seven millions in the year 1859, against eighty-five millions for the preceding year; and the importations have increased in a similar ratio; the general results for the year, when compared with 1857 and 1858, being as follows:

New-York City	1857	1858	1859
Total exports	$117,723,332	$ 85,639,653	$137,696,187
Total imports	229,640,087	152,799,388	244,341,542
Total customs revenue	35,639,075	26,476,727	38,834,212

Thus, the exports of 1859 exceeded those of 1858, sixty-two per cent., and the imports likewise increased over sixty-two and a half per cent.; the custom-house revenue increasing in nearly the same ratio.

We have not the full returns of the commerce of the United States for the same periods, but from the official reports for the fiscal years ending June 30, 1857, 1858 and 1859, it would appear that the foreign imports of New-York are about two-thirds of the whole; and the exports about one-third of the whole.

The relative importance of the foreign commerce of New-York, and all other ports of the United States, is shown in the annexed summary of imports for the years 1821, 1831, 1841 and 1851:

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[1] *Annual Report of the Chamber of Commerce for the Year 1859-60* (New York, 1860), 1–2.

Imports and Exports of the State of New-York, compared with those of the United States for the separate years, 1821, 1831, 1841 *and* 1851.

Year	Imports of New-York	Other Ports	Total United States	Per Cent. of N. Y.
1821	$ 23,629,000	$38,956,000	$ 62,585,000	37.75
1831	57,077,000	46,114,000	103,191,000	55.31
1841	75,713,000	52,233,000	127,946,000	59.18
1851	141,546,000	74,678,000	216,224,000	65.46

The growth of New-York, as the importing point, is further illustrated by the annexed summary:

IMPORTS

Year	State of N. Y.	Other Ports	Total United States	Per Cent.
1855–1856	$210,160,454	$104,479,468	$314,639,922	66.79
1856–1857	236,493,485	124,396,656	360,890,141	65.53
1857–1858	178,475,736	104,137,414	282,613,150	63.15
1858–1859	229,181,349	109,586,781	338,768,130	67.65
Four years..	$854,311,024	$442,600,319	$1,296,911,343	.....
Average....	213,577,756	110,650,079	324,227,835	65.90

EXPORTS

Year	State of N. Y.	Other Ports	United States	Per Cent.
1855–1856	$119,111,500	$207,853,408	$326,964,908	36.43
1856–1857	134,803,298	228,157,384	362,960,682	37.14
1857–1858	108,340,924	216,303,496	324,644,420	33.37
1858–1859	117,539,825	239,249,637	356,789,462	32.94
Four years..	$479,795,547	$891,563,925	$1,371,359,472	34.99

Estimating the population of the United States at thirty millions, the exports *per capita*, in 1859, would appear to be $11 89.

Taking the decennial periods from 1821 to June, 1850, and the nine years to June, 1859, it will appear that the proportion of the State of New-York to the whole has increased from 28.19 per cent.

to about thirty-five per cent. in the exports; and from 37.75 per cent. to more than two-thirds in the importations.

The custom-house returns show, that towards the close of 1859 there was a gratifying revival in the shipping business of the port of New-York, the value of both exports and imports being largely increased as compared with the corresponding period of former years; the influence of which has been felt in the advanced rates paid for freights, the relative scarcity of ships, and the improved tone of the shipping interest generally. And with commerce active, the whole basis of prosperity to our city and country must soon come under favorable influences.

B. *Foreign Trade of Boston from 1845 to 1859* [1]

Although the foreign trade of Boston was much less important than that of New York, it was considerable. The following statistics from the 1860 report of the Boston Board of Trade indicates the extent of the foreign trade of that city:

STATEMENT *of the declared value of both the Domestic and Foreign* EXPORTS *from the District of Boston and Charlestown, during the years ending June* 30, 1846–59.

	Total	Gold and Silver Coin and Bullion included in the foregoing
Year ending June 30, 1846	$ 8,968,031	$ 460,815
1847	9,716,991	374,471
1848	12,204,812	2,550,857
1849	8,692,073	178,596
1850	9,141,652	559,468
1851	10,498,153	1,265,855
1852	13,388,512	4,206,743
1853	18,094,683	4,004,549
1854	19,751,916	5,268,450
1855	26,641,661	12,279,068
1856	27,985,653	12,010,083
1857	28,326,918	13,085,318
1858	20,979,853	5,196,167
1859	16,172,120	4,151,860

[1] *Sixth Annual Report of the Boston Board of Trade* (Boston, 1860), 90–1.

STATEMENT *of the same for the year ending December 31, 1859*

In American vessels	$ 9,729,935
In Foreign vessels	7,818,725
Total	$17,548,660
Value of gold and silver exported	5,724,970

STATEMENT *of the Declared value of Goods, Wares and Merchandise, of the growth, produce and manufacture of Foreign Countries,* IMPORTED *into the District of Boston and Charlestown, during the years ending June 30, 1846–59.*

Year ending June 30, 1846	$22,615,117
1847	35,523,968
1848	27,182,308
1849	23,341,145
1850	28,659,733
1851	30,508,417
1852	31,958,192
1853	39,300,912
1854	45,988,545
1855	43,256,279
1856	41,661,088
1857	44,840,083
1858	40,432,710
1859	41,174,670

STATEMENT *of the same for the year ending December 31, 1859*

In American vessels	$29,501,582
In Foreign vessels	14,452,443
Total	$43,954,025

C. *A View of the New Orleans Levee in 1839*[1]

The foreign commerce of New Orleans was important at an early day; and even after the railroads had robbed the Mississippi River of its up-river trade, the exports from New Orleans continued to be large. From that city were shipped great quantities of cotton, produce, molasses and tobacco. An English traveler draws a picture of the levee in 1839 as follows:

The most animated and bustling part of all the city is the Levée, or raised bank running along immediately in front of the river, and extending beyond the houses and streets, from 100 to 150 yards, for a length of at least three miles, from one end of the city to the other. Along the edge of this Levée, all the ships and vessels are anchored

[1] *The Slave States of America.* By J. S. Buckingham (London, [1842]), I, 325–7.

or moored in tiers of three or four deep. The largest and finest vessels are usually at the upper end of the city, near Lafayette, the steamboats lie in the centre, and the smaller vessels and coasters occupy the bank at the lower end of the city. It may be doubted whether any river in the world can exhibit so magnificent a spectacle as the Mississippi in this respect. There are more ships in the Thames, but the largest and finest of these are usually in the various docks, while the smaller kind are chiefly seen without, and the Thames has not half the ample breadth and sweep of the Mississippi. There are as many vessels, perhaps, in the Mersey, but these are nearly all in dock, and the river is comparatively bare. The Tagus is a broader stream, but its shipping are neither so numerous nor so fine; and even New York, splendid as is the array of ships presented by her wharfs, is not so striking as New Orleans, where a greater number of large, handsome, and fine vessels seemed to me to line the magnificent curve of the Mississippi, than I had ever before seen in any one port. The reflection that these are all congregated here to receive and convey away to other lands the produce of such mighty streams as the Missouri and the Mississippi, the Ohio, the Tennessee, the Arkansas, and the Red River, including more than 20,000 miles of inland navigation, the sources of the principal streams being in the region of perpetual snows, and their outlet in the latitude of perpetual verdure, carries one's admiration to the verge of the sublime.

The Levée itself, on the edge of which all these ships and vessels are anchored, is covered with bales of cotton and other merchandise; and in the busy season, such as that in which we were in New Orleans, in March and April, it is filled with buyers and sellers, from every part of the Union, and spectators from all parts of the world. There are no less than 1,500 drays for the conveyance of this merchandise, licensed by the city; and they seem to be all in motion, flying to and fro on a brisk trot, whether laden or empty— the horses never walking, and the drivers never sitting, either on the shafts, or in the drays, as in Europe. The bales of cotton, on their arrival in the rafts or steam-boats, from the upper country, are carried off to the numerous establishments of steam-presses, where they are compressed into about half their original bulk, and repacked in this reduced shape for shipment to foreign ports. All this, with the arrival and departure every day of many hundreds of passengers up and down the river, from Cincinnati, Louisville, St. Louis, and Pittsburg, to the Havannah, to New York, and to Texas, occasions such incessant bustle, that every body and every thing seems to be in perpetual motion.

VII. Important Export Crops

A. *Exportation of Cotton for Various Years from 1821 to 1860* [1]

The most important export crop of the United States prior to 1860 was raw cotton. It rose in value from a little over $20,000,000 in 1821 to about $160,000,000 in 1859; while the price per pound varied from 5.92 cents in 1845 to 20.9 cents in 1825.

Year	Sea Island	Other	Total	Value, Dollars	Price per pound, Cents Av.
	Pounds				
1821	11,344,066	113,549,339	124,893,405	20,157,484	16.2
1825	9,665,278	166,784,629	176,449,907	36,846,649	20.9
1830	8,147,165	290,311,937	298,459,102	29,674,883	9.9
1835	7,752,736	379,686,256	387,358,992	64,961,302	16.8
1840	8,779,669	735,161,392	743,941,061	63,870,307	8.5
1845	9,380,625	863,516,371	872,905,996	51,739,643	5.92
1850	8,236,463	627,145,141	635,381,604	71,984,616	11.3
1855	13,058,590	995,366,011	1,008,424,601	88,143,844	8.74
1856	12,797,225	1,338,634,476	1,351,431,701	128,382,351	9.49
1857	12,940,725	1,035,341,750	1,048,282,475	131,575,859	12.55
1858	12,101,058	1,106,522,954	1,118,624,012	131,386,661	11.72
1859	13,713,556	1,372,755,066	1,386,468,556	161,434,923	12.72
1860	15,598,698	1,752,087,640	1,767,686,338	191,806,555	10.85

B. *American Wheat and the World Crop, 1846–1860* [2]

Another important export crop was wheat. In growing wheat the American farmer was compelled to compete with the wheat-growing regions of Europe, and the condition of crops in those sections materially affected the price received by the American farmer. A writer in 1860 discusses American wheat in its relation to the world crop as follows:

The year of the largest import of flour into Great Britain was 1847; but in 1851 the aggregate of wheat, in flour and grain, reached the maximum. The quantities of corn and other grain imported into Great Britain have varied considerably. In 1847 the quantity was 7,448,107 qrs., or 59,584,856 bushels. Of that quantity one-third came from the United States. The quantity required has never

[1] *Treasury Report*, 1861 (Washington, 1861), 250–1.

[2] *Hunt's Merchants' Magazine* (New York, 1860), XLIII, 405–8.

been so large since. France was a large importer of wheat in those years — '46 and '47. The demand of those two countries upon the rest of the world was, it appears, 99,849,272 bushels — a quantity nearly equal to the whole crops of the United States. The States of Belgium and Holland were also short, and while all the navigation laws were suspended to give perfect freedom for the transportation of grain, and some national vessels were used to transport it, the prices of freight rose immensely. Flour to Liverpool, from New York, paid $2 per bbl., and grain 50 cents per bushel. While these enormous supplies were required, and prices that rose at one time to 120 s. per quarter were paid, the United States supplied but a very unimportant proportion of the whole amount — that is to say, about 44,000,000 bushels. From 1848 to 1852 France was an exporter of wheat. The demand upon the markets of the world was thereby diminished, and the supply increased. The crop of 1852 again failed in France, and from that date, through the Russian war, she was again a large importer. In the four years ending with 1857 she bought 85,800,000 bushels of wheat, and England bought 184,000,000 in the same time, or together, 269,800,000 bushels, of which the United States supplied 67,700,000 bushels, or 25 per cent. In all that period, in the United States the consumption of food was very active, because the building of railroads was pursued to an extent that absorbed $600,000,000 of capital; land speculations were rife; 2,000,000 emigrants arrived in the country, and great numbers moved from East to West on the new lands that were to be soon covered with the growing railroads. These causes produced such a demand for food at the door of the growers as to leave but little surplus to send East, and the quantities that did go abroad could be spared only at very high prices. We have in those causes a reason that the United States, a peculiarly agricultural country, have not yet taken their rank as a supplier of food for Europe. In the years of large demand heretofore the means of transportation did not exist. In the last three years, when the means did exist, the demand was slack. The moment has now apparently arrived when the demand is to take place in face of the most extensive means of meeting it. The Western crops are represented as so large as to give rise to fears that it may be overdone, and that the demand, great as it may be from Europe, will not suffice to raise prices, in face of such overwhelming supplies, to a level that will pay for the distant transportation. In other words, that the demand will be met before the most remote States can get their supplies to hand.

If we look back to the famine of 1847, we find that the Erie Canal and the lines of roads that now form the New York Central were the only through communications to the lakes. They were the only means of freight transportation, and the law did not allow the railroad to carry freight until 1850. The basin of the great lakes was fed only by the Ohio canals at Toledo and Cleveland. The Indiana — which canal did not operate — the Illinois Canal was not then available, and there were no railroads to drain the produce of the interior to the ports. The great rivers carried down supplies to New Orleans, and food found its way abroad thence. The lakes were supplied with a very moderate amount of sail tonnage, and the expense of transportation from Chicago to New York was very great.

The great famine demand began in 1846. At the close of July, in that year, the price of flour in New York was $4, and the rate rose steadily until it reached $9 12 per barrel. . . .

Thus, over 26,000,000 bushels of wheat were exported as flour and grain, and that export raised flour to $9 12 per barrel. Of corn only 16,326,050 bushels were exported; but that small quantity only — not 3 per cent. of the crop — raised the price to 90 cents per bushel, and the freight to 28 s. [d?], or 56 cents from New York to Liverpool in February, 1847. The total tonnage of the United States in that year was 1,241,313 registered, and 1,597,733 coasting. Of the latter, 147,883 was owned at the lake ports, and 84,731 at the river ports — there being then no railroad transportation. The production of grain in 1847 was probably by no means so large as the figures given for the census of 1850, since the high price obtained in those famine years not only stimulated production, but also ship building. These two circumstances caused low prices of grain and of freights in the succeeding years. It then appears that one of the most extraordinary famines of modern times could only draw from the United States 42,000,000 bushels of corn and wheat.

The high freights greatly stimulated the building of vessels — as well registered as coasting and lake tonnage — and the returns show that the latter increased 50 per cent, and the building of registered was in as large a ratio. The trade of 1847 was strangled for want of means of transportation. These had increased very much up to 1853. In the five years from 1847 to 1853 the government sold 12,000,000 acres of public lands, and 1,500,000 settlers arrived from abroad, while great numbers moved from the Eastern States to the West. In the same period the Northern line of railroads was opened; the New York Central allowed to carry freight; the Erie was opened

through, and the connection between Baltimore and Philadelphia and the West completed. In 1847 the Ohio Canal at Cleveland was the only work which fed the lakes, and these delivered 644,913 barrels of flour in that year. Before 1853 the Indiana Canal was opened; the two great Michigan roads were opened, and the Illinois canal was completed, drawing grain to Chicago, in connection with one or two railroads. The tonnage of the lakes had become large, and the tonnage of the whole country had increased from 2,417,000 in 1847, to 4,138,440 in 1852, or 45 per cent. Such was the state of affairs when the harvest of Europe again failed in 1852. The lake tonnage had increased to 271,100, and the river tonnage to 169,000.

In this state of affairs the harvest of Europe again failed — not the potato crop so much as the grain crop — and there was again much excitement, and we may trace its influence upon the markets. It is now just seven years since the English harvests promised the same as they now do. At that time the present writer had occasion to describe the state of the markets as follows, after carefully condensing the news:—

"Many weeks since we laid before our readers the leading circumstances that were conspiring to make the coming year one of the most important eras in the corn trade. Unfortunately the weather in England and Western Europe has been such as to heighten the worst features of the case, and support large estimates of the probable wants of the West of Europe, including England. The government of France has exerted itself to keep down prices; but the general rise in France of $14\frac{1}{8}$ cents per bushel, together with the suspension of the corn duties in France, Belgium, Holland and Italy, has sent the English and French buyers in competition into this market. Leading English firms, although impressed with the idea that the demand is to some extent speculative and premature, have sent orders for choice flour, limited at 25 s., laid down in Liverpool. According to present estimates the wants are: —

Of France	bushels,	38,781,165
Of England	"	128,000,000
Total, all kinds of grain	"	166,781,165

"In usual years England wants half this quantity, or 64,000,000 bushels, of which France supplies usually 30,000,000, making the two countries dependent upon the rest of Europe for 34,000,000 bushels; hence they require, together, 132,000,000 bushels more than

usual; and Holland, Belgium, Italy, and Egypt are short. These general facts are calculated to excite the minds of holders extravagantly, and cause loss and disaster by inducing them to hold for exorbitant prices. The lesson of former years showed that first sellers did best."

Bearing in mind what we had said of the exaggeration of the English reports, it will be obvious that the estimated wants were three times what was actually imported, and France imported about one-fourth of the estimates.

Such was the state of affairs in 1853, and the description will answer pretty well for the present prospect. . . .

C. *Exportation of Indian Corn, 1820–1860* [1]

Although Indian corn was not as large an export commodity before 1860 as wheat or cotton, it was of considerable importance and growing. Its place in the foreign commerce of the United States was as follows:

In the year 1816 the crop of Indian corn was very generally cut off throughout the northern states by frequent and severe frosts, so that as a cultivated crop it fell into disrepute in many sections, and was cultivated less for some years, by individual farmers, till its intrinsic importance as a sure and reliable crop brought it gradually into favor. At the time it was first included in the United States census, in 1840, the aggregate yield of the country was 377,531,875, or nearly four hundred millions bushels. In 1850 it had reached within a fraction of six hundred millions, being returned as 592,071,104, occupying 31,000,000 of acres. The value of this enormous crop was $296,034,552. This was a gain of 57 per cent., or 214,539,229 bushels, while the increase of population during the same period was only 35 per cent. According to the estimate of the secretary of the treasury, the crop of Indian corn in 1855 was between seven and eight hundred millions, or nearly double that of 1840. But this estimate was entirely too low, the crop being the largest and best that year that had ever been raised in the country, and amounting, at least, to 1,000,000,000 bushels, and its value, at a low estimate, was $400,000,000.

We see, therefore, on reference to the census, that this crop formed about three-sixteenths of the whole agricultural product of the country in 1850, and that the proportion of improved land devoted to corn

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[1] *Eighty Years' Progress.* By Charles L. Flint (Hartford, 1869), 70–1.

was .333, while the number of bushels to each person in the country was 25.53.

From the amounts of corn stated above, as raised in 1840 and in 1850, it will be seen that we had a very large surplus over and above what we needed for home consumption; though it must be evident that vast quantities are, and must be required to feed to the large number of cattle and swine, which we have seen are annually prepared for the shambles. It appears from official statistics that the exportation of Indian corn has rapidly increased since 1820, when it amounted to only 607,277 bushels, valued at $261,099, and 131,669 barrels of Indian meal, valued at $345,180, making an aggregate of $616,279. In 1830–1 the number of bushels of corn exported from the country was 571,312, valued at $396,617, and 207,604 barrels of Indian meal, valued at $595,434. In 1840–1 the number of bushels of corn exported was 535,727, valued at $312,954, with 232,284 barrels of meal, worth $682,457.

But in 1845–6 the amount rose to 1,826,068 bushels, valued at $1,186,663; and from that in 1846–7 to 16,326,050 bushels of corn, worth $14,395,212. The next year, 1847–8, it reached nearly six millions of bushels; and in 1848–9 to upward of thirteen millions, valued at $7,966,369.

The amount of Indian corn and Indian meal exported from the country from 1851 to 1858 may be seen as follows:—

	Bush. of corn	Value	Bbls. of Indian meal	Value
1851	3,426,811	$1,762,549	203,622	$ 622,866
1852	2,627,075	1,540,225	181,105	574,380
1853	2,274,909	1,374,077	212,118	709,974
1854	7,768,816	6,c74,277	257,403	1,002,976
1855	7,807,585	6,961,571	267,208	1,237,122
1856	10,292,280	7,622,565	293,607	1,175,688
1857	5,505,318	5,184,666	267,504	957,791
1858	4,766,145	3,259,039	237,637	877,692

The amount of exports is, of course, regulated very much by foreign demand. If breadstuffs are scarce in Europe and prices high, they are immediately shipped from this country to take advantage of the market. If the reverse is the case, and prices are low, our surplus is kept at home. It is but a few years since the foreign demand for

breadstuffs began to any extent. Now and then would occur a year of unusual scarcity, to be sure, but it was rare to find any extensive demand year after year for our surplus products. The increase of population beyond the point of capacity to produce, in Great Britain and the continent of Europe, now gives the bread question an importance paramount to all others with the European statesman, and it is having and will have a powerful influence on our agriculture. Consumption has overtaken production — got beyond it, in fact, in some of the countries of Europe — and henceforth importation must supply an ever increasing demand, since, however much the agricultural production of western Europe may increase by the improving condition of its agriculture, it cannot hereafter keep up with the natural increase of population, which, at the present time, in Great Britain, is at the rate of a thousand per day. This crowding population will appear in its true light, in an agricultural point of view, when it is considered that if the United States and its territories were as thickly populated as Great Britain, they would contain about 750,000,000 of people, a number nearly equal to the whole population of the globe.

The year 1824, it is asserted by some, was the turning point at which consumption overtook and exceeded production in England. Since that time the agricultural production of Great Britain has been vastly increased by the improvement of agriculture and live stock; but great and perceptible as improvement has been, it has not, and cannot fully supply its overgrown population. The famine in Ireland in 1847, causing the loss of half a million of lives by starvation, and the political revolution which soon followed on the continent in 1848, growing out, to a great extent, of a short supply of food, are fresh in the minds of everyone.

Now this surplus of population and the consequent permanent demand for the productions of our soil are of comparatively recent date, and we have hardly, even yet, begun to realize their importance and the influence which they are hereafter to exert in developing the resources of our soil. It was only a century ago (1756) when D'Anqueville, a political economist of France, said: "England could grow corn enough in one year to supply herself for four." Now, though she has, at least, three times as much land under cultivation as then, and though the yield of her products to the acre has been more than doubled, yet she imports food in the shape of corn, wheat, oats, meal, and flour to the extent of more than £45,000,000, or $225,000,000. Now, though western Europe has been supplied, to a large extent,

from Russia and other parts of the world, it is becoming more and more evident that it has got to look more and more to this country for its supplies, and this fact is recognized by many of the leading journals and statesmen of Europe, as, for instance, the *Mark Lane Gazette*, which says: "One fact is clear, that it is to western America that we must, in future, look for the largest amount of cereal produce."

CHAPTER XIV

PUBLIC LANDS AND AGRICULTURE, 1820–1860

I. The Public Domain

Extent and Importance, 1832 [1]

Before the Civil War, and even afterward, Congress repeatedly legislated regarding the public lands. These lands were the common property of the states and tended to hold them together by a common interest. At the same time the public land question is intimately linked with the slavery question, for it was the desire of each section to exclude the other from the territories that brought about so much controversy.

At the beginning of its land policy, Congress thought more of the revenue to be derived than the good to be extended. In time, however, this policy underwent a change. The price of land was reduced, the minimum size of entry was decreased, and the settlers encouraged in other ways to take up land. To facilitate this movement, many of the states requested the federal government to grant to them the unentered lands lying within their borders. This agitation, coupled with the one for a reduction in the price per acre, occupied the attention of Congress in 1831–2. Mr. Clay, as chairman of the senate committee on manufactures, reported in part on the public domain as follows:

> At the commencement of the revolutionary war, there were, in some of the States, large bodies of waste and unappropriated lands, principally west of the Alleghany mountains, and in the southern or southwestern quarters of the Union; whilst in others, of more circumscribed or better defined limits, no such resource existed. During the progress of that war, the question was agitated what should be done with these lands in the event of its successful termination? That question was likely to lead to paralyzing divisions and jealousies. The States not containing any considerable quantity of waste lands, contended that, as the war was waged with united means, with equal sacrifices, and at the common expense, the waste lands ought to be considered as a common property, and not be exclusively appropriated to the benefit of the particular States within which they happened to be situated. These, however, resisted the claim, upon the

[1] *Senate Committee Report.* Henry Clay, chairman. Printed in House Reports, 1831–2 (Washington, 1831 [1832?]), III, Report 448, pp. 14–17, 19–26.

ground that each State was entitled to the whole of the territory, whether waste or cultivated, included within its chartered limits. To check the progress of discontent, and arrest the serious consequences to which the agitation of this question might lead, Congress recommended to the States to make liberal cessions of the waste and unseated lands to the United States; and, on the 10th day of October, 1780, "*Resolved*, That the unappropriated lands that may be ceded or relinquished to the United States, by any particular State, pursuant to the recommendation of Congress of the 6th day of September last, shall be disposed of *for the common benefit* of the United States," &c. . . .

The other source whence the public lands of the United States have been acquired, are, 1st, the treaty of Louisiana, concluded in 1803; and, 2dly, the treaty of Florida, signed in 1819. By the first, all the country west of the Mississippi, and extending to the Pacific ocean, known as Louisiana, which had successively belonged to France, Spain, and France again, including the island of New Orleans, and stretching east of the Mississippi to the Perdido, was transferred to the United States in consideration of the sum of fifteen millions of dollars, which they stipulated to pay, and have since punctually paid, to France, besides other conditions deemed favorable and important to her interests. By the treaty of Florida, both the provinces of East and West Florida, whether any portion of them was or was not actually comprehended within the true limits of Louisiana, were ceded to the United States in consideration, besides other things, of the payment of five millions of dollars which they agreed to pay, and have since accordingly paid.

The large pecuniary considerations thus paid to these two foreign powers were drawn from the Treasury of the people of the United States; and, consequently, the countries for which they formed the equivalents ought to be held and deemed for the common benefit of all the people of the United States. To divert the lands from that general object; to misapply or sacrifice them; to squander or improvidently cast them away; would be alike subversive of the interests of the people of the United States, and contrary to the plain dictates of the duty by which the General Government stands bound to the States and to the whole people.

Prior to the treaties of Louisiana and Florida, Congress had adopted a system for surveying and selling the public lands, devised with much care and great deliberation, the advantages of which having been fully tested by experience, it was subsequently applied to the coun-

tries acquired by those treaties. According to that system, all public lands offered for sale, are previously accurately surveyed, by skilful surveyors, in ranges of townships of six miles square each, which townships are subdivided into thirty-six equal divisions or square miles, called sections, by lines crossing each other at right angles, and generally containing 640 acres. These sections are again divided into quarters, and, prior to the year 1820, no person could purchase a less quantity than a quarter. In that year, provision was made for the further division of the sections into eighths, thereby allowing a purchaser to buy only eighty acres, if he wished to purchase no more. During the present session of Congress, further to extend accommodations to the purchasers of the public lands, and especially to the poorer classes, the sections have been again divided into sixteenths, admitting a purchase of only forty acres. . . .

. . . [I]t appears that the aggregate of all sums of money which have been expended by the United States in the acquisition of the public lands, including interest on account of the purchases of Louisiana and Florida, up to the 30th day of September, 1831, and including also expenses in their sale and management, is $48,077,551 40; and the amount of money received at the Treasury for proceeds of the sales of the public lands to the 30th September, 1831, is $37,272,713 31. The Government, therefore, has not been reimbursed by $10,804,838$\frac{9}{10}$. According to the same report, it appears that the estimated amount of unsold lands, on which the foreign and Indian titles have been extinguished, is 227,293,884 within the limits of the new States and Territories; and that the Indian title remains on 113,577,869 acres within the same limits. That there have been granted to Ohio, Indiana, Illinois, and Alabama, for internal improvements, 2,187,665 acres; for colleges, academies and universities in the new States and Territories, the quantity of 508,009; for education, being the thirty-sixth part of the public lands appropriated for common schools, the amount of 7,952,538 acres; and for seats of Government in some of the new States and Territories, 21,589 acres. By a report of the Commissioner of the General Land Office, communicated to Congress with the annual message of the President of the United States in December, 1827, the total quantity of the public lands, beyond the boundaries of the new States and Territories, was estimated to be 750,000,000. The aggregate, therefore, of all the unsold and unappropriated public lands of the United States, surveyed and unsurveyed, on which the Indian title remains or has been extinguished, lying within, and without the boundaries of the new States and Terri-

tories, agreeably to the two reports now referred to, is 1,090,871,753 acres. There had been 138,988,224 acres surveyed, and the quantity only of 19,239,412 acres sold up to the 1st January, 1826. . . .

The Government is the proprietor of much the largest quantity of the unseated lands of the United States. What it has in market, bears a large proportion to the whole of the occupied lands within their limits. If a considerable quantity of any article, land, or any commodity whatever, is in market, the price at which it is sold will affect, in some degree, the value of the whole of that article, whether exposed to sale or not. The influence of a reduction of the price of the public lands would probably be felt throughout the Union; certainly in all the western States, and most in those which contain, or are nearest to, the public lands. There ought to be the most cogent and conclusive reasons for adopting a measure which might seriously impair the value of the property of the yeomanry of the country. Whilst it is decidedly the most important class in the community, most patient, patriotic, and acquiescent in whatever public policy is pursued, it is unable or unwilling to resort to those means of union and concert which other interests employ to make themselves heard and respected. Government should, therefore, feel itself constantly bound to guard, with sedulous care, the rights and welfare of the great body of our yeomanry. Would it be just towards those who have heretofore purchased public lands at higher prices, to say nothing as to the residue of the agricultural interest of the United States, to make such a reduction, and thereby impair the value of their property? Ought not any such plan of reduction, if adopted, to be accompanied with compensation for the injury which they would inevitably sustain?

A material reduction of price would excite and stimulate the spirit of speculation, now dormant, and probably lead to a transfer of vast quantities of the public domain from the control of Government to the hands of the speculator. At the existing price, and with such extensive districts as the public constantly offers in the market, there is no great temptation to speculation. The demand is regular, keeping pace with the progress of emigration, and is supplied on known and moderate terms. If the price were much reduced, the strongest incentives to engrossment of the better lands would be presented to large capitalists; and the emigrant, instead of being able to purchase from his own Government upon uniform and established conditions, might be compelled to give much higher and more fluctuating prices

to the speculator. An illustration of this effect is afforded by the military bounty lands granted during the late war. Thrown into the market at prices below the Government rate, they notoriously became an object of speculation, and have principally fallen into the hands of speculators, retarding the settlement of the districts which include them.

The greatest emigration that is believed now to take place from any of the States, is from Ohio, Kentucky, and Tennessee. The effects of a material reduction in the price of the public lands, would be, 1st. To lessen the value of real estate in those three States. 2d. To diminish their interest in the public domain, as a common fund for the benefit of all the States. And, 3dly. To offer what would operate as a bounty to further emigration from those States, occasioning more and more lands, situated within them, to be thrown into the market, thereby not only lessening the value of their lands, but draining them both of their population and currency.

And, lastly, Congress has, within a few years, made large and liberal grants of the public lands to several States. To Ohio, 922,937 acres; to Indiana, 384,728 acres; to Illinois, 480,000 acres; and to Alabama, 400,000 acres; amounting, together, to 2,187,665 acres. Considerable portions of these lands yet remain unsold. The reduction of the price of the public lands, generally, would impair the value of those grants, as well as injuriously affect that of the lands which have been sold in virtue of them.

On the other hand, it is inferred and contended, from the large amount of public land remaining unsold after having been so long exposed to sale, that the price at which it is held is too high. But this apparent tardiness is satisfactorily explained by the immense quantity of public lands which have been put into the market by Government. It is well known that the new States have constantly and urgently pressed the extinction of the Indian title upon lands within their respective limits; and, after its extinction, that they should be brought into market as rapidly as practicable. The liberal policy of the General Government, coinciding with the wishes of the new States, has prompted it to satisfy the wants of emigrants from every part of the Union, by exhibiting vast districts of land for sale in all the States and Territories, thus offering every variety of climate and situation to the free choice of settlers. From these causes, it has resulted that the power of emigration has been totally incompetent to absorb the immense bodies of waste lands offered in the market. For the capacity to purchase is, after all, limited by the emigration,

and the progressive increase of population. If the quantity thrown into the market had been quadrupled, the probability is that there would not have been much more annually sold than actually has been. With such extensive fields for selection before them, purchasers, embarrassed as to the choice which they should make, are sometimes probably influenced by caprice or accidental causes. Whilst the better lands remain, those of secondary value will not be purchased. A judicious farmer or planter would sooner give one dollar and a quarter per acre for first rate land, than receive, as a donation, land of an inferior quality, if he were compelled to settle upon it. . . .

Is the reduction of the price of the public lands necessary to accelerate the settlement and population of the States within which they are situated? Those States are Ohio, Indiana, Illinois, Missouri, Alabama, Mississippi, and Louisiana. If their growth has been unreasonably slow and tardy, we may conclude that some fresh impulse, such as that under consideration, is needed. Prior to the treaty of Greenville, concluded in 1795, there were but few settlements within the limits of the present State of Ohio. Principally since that period, that is, within a term of about forty years, that State, from a wilderness, the haunt of savages and wild beasts, has risen into a powerful commonwealth, containing, at this time, a population of a million of souls, and holding the third or fourth rank among the largest States in the Union. During the greater part of that term, the minimum price of the public lands was two dollars per acre; and of the large quantity with which the settlement of that State commenced, there only remain to be sold 5,586,834 acres.

The aggregate population of the United States, exclusive of the Territories, increased from the year 1820 to 1830, from 9,579,873 to 12,716,697. The rate of the increase, during the whole term of ten years, including a fraction, may be stated at thirty-three per cent. The principle of population is presumed to have full scope generally in all parts of the United States. Any State, therefore, which has exceeded or fallen short of that rate, may be fairly assumed to have gained or lost by emigration, nearly to the extent of the excess or deficiency. From a table accompanying this report, the Senate will see presented various interesting views of the progress of population in the several States. In that table, it will be seen that each of eleven States exceeded, and each of thirteen fell short of an increase at the average rate of thirty-three per cent. The greatest increase, during the term, was in the State of Illinois, where it was one hundred and

eighty-five per cent., or at the rate of 18½ per cent. per annum; and the least was in Delaware, where it was less than six per cent. The seven States embracing the public lands, had a population, in 1820, of 1,207,165, and, in 1830, 2,238,802, exhibiting an average increase of 85 per cent. The seventeen States containing no part of the public lands, had a population, in 1820, of 8,372,707, and, in 1830, of 10,477,895, presenting an average increase of only 25 per cent. The thirteen States, whose increase, according to the table, was below 33 per cent. contained, in 1820, a population of 5,939,759, and, in 1830, of 6,966,600, exhibiting an average increase of only seventeen per cent. The increase of the seven new States upon a capital which, at the commencement of the term, was 1,207,165, has been greater than that of the thirteen whose capital then was 5,939,759. In three of the eleven States, (Tennessee, Georgia, and Maine,) whose population exceeded the average increase of 33 per cent., there were public lands belonging to those States; and, in the fourth, (New York,) the excess is probably attributable to the rapid growth of the city of New York, to waste lands in the western part of that State, and to the great development of its vast resources by means of extensive internal improvements. . . .

Complaints exist in the new States, that large, bodies of lands, in their respective territories, being owned by the General Government, are exempt from taxation to meet the ordinary expenses of the State Governments, and other local charges; that this exemption continues for five years after the sale of any particular tract; and that land, being the principal source of the revenue of those States, an undue share of the burthen of sustaining the expenses of the State Governments falls upon the resident population. To all these complaints, it may be answered that, by voluntary compacts between the new States respectively, and the General Government, five per cent. of the nett proceeds of all the sales of the public lands, included within their limits, are appropriated for internal improvements leading to or within those States; that a section of land in each township, or one-thirty-sixth part of the whole of the public lands embraced within their respective boundaries, has been reserved for purposes of education; and that the policy of the General Government has been uniformly marked by great liberality towards the new States, in making various, and some very extensive grants of the public lands for local purposes. But, in accordance with the same spirit of liberality, the committee would recommend an appropriation to each of the seven States referred to, of a further sum of ten per cent. on the nett proceeds

of the sales of that part of the public land which lies within it, for objects of internal improvement in their respective limits. The tendency of such an appropriation will be not only to benefit those States, but to enhance the value of the public lands remaining to be sold. . . .

If the proposed cession to the new States were to be made at a fair price, such as the General Government could obtain from individual purchasers under the present system, there would be no motive for it, unless the new States are more competent to dispose of the public lands than the common Government. They are now sold under one uniform plan, regulated and controlled by a single legislative authority, and the practical operation is perfectly understood. If they were transferred to the new States, the subsequent disposition would be according to laws emanating from various legislative sources. Competition would probably arise between the new States in the terms which they would offer to purchasers. Each State would be desirous of inviting the greatest number of emigrants, not only for the laudable purpose of populating rapidly its own territories, but with the view to the acquisition of funds to enable it to fulfil its engagements to the General Government. Collisions between the States would probably arise, and their injurious consequences may be imagined. A spirit of hazardous speculation would be engendered. Various schemes in the new States would be put afloat to sell or divide the public lands. Companies and combinations would be formed in this country, if not in foreign countries, presenting gigantic and tempting, but delusive projects; and the history of legislation, in some of the States of the Union, admonishes us that a too ready ear is sometimes given by a majority, in a legislative assembly, to such projects.

A decisive objection to such a transfer for a fair equivalent, is, that it would establish a new and dangerous relation between the General Government and the new States. In abolishing the credit which had been allowed to purchasers of the public lands prior to the year 1820, Congress was principally governed by the consideration of the inexpediency and hazard of accumulating a large amount of debt in the new States, all bordering on each other. Such an accumulation was deemed unwise and unsafe. It presented a new bond of interest, of sympathy, and of union, partially operating to the possible prejudice of the common bond of the whole Union. But that debt was a debt due from individuals, and it was attended with this encouraging security, that purchasers, as they successively completed the payments

for their lands, would naturally be disposed to aid the Government in enforcing payment from delinquents. The project, which the committee are now considering, is, to sell to the States, in their sovereign character, and, consequently, to render them public debtors to the General Government to an immense amount. This would inevitably create between the debtor States a common feeling, and a common interest, distinct from the rest of the Union. These States are all in the western and southwestern quarter of the Union, remotest from the centre of federal power. The debt would be felt as a load from which they would constantly be desirous to relieve themselves; and it would operate as a strong temptation, weakening, if not dangerous, to the existing confederacy. . . .

If the proposed cession be made for a price merely nominal, it would be contrary to the express conditions of the original cessions from primitive States to Congress, and contrary to the obligations which the General Government stands under to the whole people of the United States, arising out of the fact that the acquisitions of Louisiana and Florida, and from Georgia, were obtained at a great expense, borne from the common treasure, and incurred for the common benefit. Such a gratuitous cession could not be made without a positive violation of a solemn trust, and without manifest injustice to the old States. And its inequality among the new States would be as marked as its injustice to the old would be indefensible. Thus, Missouri, with a population of 140,455, would acquire 38,291,152 acres; and the State of Ohio, with a population of 935,884, would obtain only 5,586,834 acres. Supposing a division of the land among the citizens of those two States respectively, the citizen of Ohio would obtain less than six acres for his share, and the citizen of Missouri upwards of two hundred and seventy-two acres as his proportion.

Upon full and thorough consideration, the committee have come to the conclusion, that it is inexpedient either to reduce the price of the public lands, or to cede them to the new States. They believe, on the contrary, that sound policy coincides with the duty which has devolved on the General Government to the whole of the States, and the whole of the people of the Union, and enjoins the preservation of the existing system as having been tried and approved after long and triumphant experience. But, in consequence of the extraordinary financial prosperity which the United States enjoy, the question merits examination, whether, whilst the General Government steadily retains the control of this great national resource in its own hands, after the payment of the public debt, the proceeds of the sales of the public

lands, no longer needed to meet the ordinary expenses of Government, may not be beneficially appropriated to some other objects for a limited time? . . .

The inquiry remains, what ought to be the specific application of the fund under the restriction stated? After deducting the ten per cent. proposed to be set apart for the new States, a portion of the committee would have preferred that the residue should be applied to the objects of internal improvement, and colonization of the free blacks, under the direction of the General Government. But a majority of the committee believes it better, as an alternative for the scheme of cession to the new States, and as being most likely to give general satisfaction, that the residue be divided among the twenty-four States, according to their federal representative population, to be applied to education, internal improvement, or colonization, or to the redemption of any existing debt contracted for internal improvements, as each State, judging for itself, shall deem most conformable with its own interests and policy. . . .

II. The Public Lands and Wages

A. *Secretary Walker on the Public Lands, 1845* [1]

The ease with which public land could be acquired by the people had an important influence on American industry. Practically every employee, whether he worked in town or on the land, was a potential land owner, and should he at any time become dissatisfied with conditions he had the opportunity of turning to the land. Such a situation tended to make wages relatively high in all kinds of industries. Furthermore, it held out to the day worker the opportunity of becoming his own master by taking up and cultivating the soil. Because of this possibility of escape to the land, labor was generally prosperous, and the labor troubles of a later date were yet unknown.

Connected with this department, and the finances, is the question of the sales of the public lands. The proceeds of these sales, it is believed, should continue to constitute a portion of the revenue, diminishing to that extent the amount required to be raised by the tariff. The net proceeds of these sales paid into the treasury during the last fiscal year, was $2,077,022 30; and from the first sales in 1787 up to the 30th of September last, was $118,607,335 91. The average annual sales have been much less than 2,000,000 of acres; yet the aggregated net proceeds of the sales in 1834, 1835, 1836, and 1837, was $51,268,617 82. Those large sales were almost exclusively for

[1] *Treasury Report, 1845* (Washington, 1846), 15–16.

speculation; and this can only be obviated, at all times, by confining the sales to settlers and cultivators in limited quantities, sufficient for farms or plantations. The price at which the public lands should be sold is an important question to the whole country, but especially to the people of the new States, living mostly remote from the seaboard, and who have scarcely felt the presence of the government in local expenditures, but chiefly in the exhaustion of their means for purchases of public lands and for customs. The public lands are not of the same value; yet they are all fixed at one unvarying price, which is far above the value of a large portion of these lands. The quantity now subject to entry at the minimum price of $1 25 per acre is 133,307,457 acres, and 109,035,345 in addition, to which the Indian title has been extinguished — being an aggregate of 242,342,802 acres, and requiring a century and a quarter to complete the sales at the rate they have progressed heretofore, without including any of the unsold lands of Texas or Oregon, or of the vast region besides to which the Indian title is not yet extinguished. It is clear, then, that there is a vast and annually-increasing surplus of public lands, very little of which will be sold within any reasonable period at the present price, and in regard to which the public interest would be promoted, and the revenue augmented, by reducing the price. The reduction of the price of the public lands in favor of settlers and cultivators, would enhance the wages of labor. It is an argument urged in favor of the tariff, that we ought to protect our labor against what is called the pauper labor of Europe. But whilst the tariff does not enhance the wages of labor, the sales of the public lands at low prices, and in limited quantities, to settlers and cultivators, would accomplish this object. If those who live by the wages of labor could purchase 320 acres of land for $80, 160 acres for $40, or 80 acres for $20, or 40 acre lot for $10, the power of the manufacturing capitalist in reducing the wages of labor would be greatly diminished; because, when these lands were thus reduced in price, those who live by the wages of labor could purchase farms at these low rates, and cultivate the soil for themselves and families, instead of working for others twelve hours a day in the manufactories. Reduce the price which the laborer must pay for the public domain; bring thus the means of purchase within his power; prevent all speculation and monopoly in the public lands; confine the sales to settlers and cultivators, in limited quantities; preserve these hundreds of millions of acres, for ages to come, as homes for the poor and oppressed; reduce the taxes, by reducing the tariff, and bringing down the prices which the poor

are thus compelled to pay for all the necessaries and comforts of life, and more will be done for the benefit of American labor than if millions were added to the profits of manufacturing capital by the enactment of a protective tariff.

B. *Ease of Acquisition of Public Lands in 1832* [1]

A magazine writer of the times called attention to the ease with which a laborer could acquire land for himself as follows:

A few facts on this subject will set this matter in its true light. Land is now sold in tracts of 80 acres, at $1 25 per acre. For 100 dollars, an unimproved tract of 80 acres may be purchased. In any of the states west of the Ohio river, a labourer can earn 75 cents per day, and if his living be supposed to cost 25 cents a day, which in this plentiful country is a large estimate, he can, by the labour of *two hundred* days, or about *eight* months, purchase a farm. But as the working days in a year, excluding bad weather, would not amount to more than 200, it may be safely asserted, that a labourer can purchase a tract of 80 acres, by one year's steady labour. Again, a labourer can get his boarding and $10 per month, the year round, which would amount to $120, and if $20 be deducted for clothing, he will in this way have earned the purchase money of a farm, in one year. All kinds of stock can be raised in that country with facility, and at little cost. A good horse is worth fifty dollars, a cow from five to eight dollars, a fat steer from ten to fifteen, and hogs two dollars per hundred pounds. A man then can purchase eighty acres of land, by the sale of two horses, or from eight to twelve head of cattle, or twenty to twenty-five hogs; and as individuals are not prevented from settling on the public land, but rather encouraged, the means are thus afforded to farmers of acquiring this property, previous to the purchase of land. Mechanics' wages are much higher; and those who work in the most *useful* arts, such as carpenters, blacksmiths, shoemakers, &c., are greatly needed. An individual of this class, may earn money enough to buy eighty acres, in six months. A person who teaches a common English school, receives three dollars per quarter for each pupil, and such persons are in great demand. A school of thirty scholars will yield ninety dollars per quarter, or $360 per year. The school-house and fuel being furnished by the patrons, and boarding costing about one dollar per week, such an individual may in one year buy a tract of land. . . .

[1] *American Quarterly Review* (Philadelphia, 1832), No. XXII, 280.

III. Speculation in Public Lands

A. *Land Speculation, 1840* [1]

The favorable terms on which government lands could be acquired and the rapid growth of the population in the west caused speculators to buy up the land in the hope of reselling it at a substantial advance in price. Oftentimes towns were laid out in the forests or on the open prairie and advertised as future centers of trade and industry. Some of the cities thus advertised more than realized the claims of their friends, but a great majority of them have no existence at the present time. This speculation did the people a positive injury. It created the desire to become wealthy without labor, and tended to minimize the successes that came under ordinary conditions. Of this practice, Mr. Hildreth, the historian, had the following to say:

Simultaneously with this increase in the regular trade, and as generally happens in like cases, a good many new speculations were brought forward and pursued with ardor. Among these, the speculation in Maine timber lands was the first in order, the most extravagant and irrational, and the most ruinous to those engaged in it. An idea was started that the timber in Maine was diminishing so rapidly that the supply must soon be exhausted, and that those who engrossed what remained, could not fail to grow rich. The rage to purchase these lands became excessive, and the most extravagant prices were paid. Many gross frauds were committed, and many arts were resorted to, to entrap purchasers and keep up the price. But it was soon discovered that the foundation upon which this speculation rested, was unsound. The lands, late so precious, became altogether unsalable, and many who imagined they had made great fortunes, found themselves bankrupt. New England and the city of New York were the chief sufferers in this business, which however was of too limited a character to produce any general effects.

The speculations in the public lands, by which this period was distinguished, were of a far more extended character. Lands were purchased of the government, in the years 1834, '35, and '36, to the amount of forty-seven millions of dollars, being nearly half of the total amount which, up to that time, had been received from that source. The cause of these immense purchases is to be found in the following considerations. By the Indian removal policy, which formed a part of General Jackson's system of administration, vast tracts of land, both in the North and South, had been suddenly denuded of

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[1] *Banks, Banking, and Paper Currencies.* By Richard Hildreth (Boston, 1840). 91–2.

their aboriginal inhabitants, and brought into the market. Many of these lands held out a great temptation to settlers from their fertility and situation; and the high prices of cotton and flour brought a flood of emigration into the South and West, and held out great temptations to speculators to take up large quantities of the government lands, in hopes to sell again at a profit. The influx of emigrants into these states led, of course, to a great increase of trade. This caused many villages, and even some considerable towns, to spring suddenly into existence, and led to a great speculation in "town lots" and sites for new towns, of a much more extravagant and dangerous nature than the mere purchase of public lands. Many of those purchases, considering the situation and means of those who made them, were no doubt injudicious; but taken as a whole, they will perhaps prove a source of profit to the purchasers.

B. *A View of Western Speculation before the Civil War* [1]

Naturally the center of land speculation was in the west, where land was plentiful and cheap.

Speculation in real estate has for many years been the ruling idea and occupation of the Western mind. Clerks, labourers, farmers, storekeepers, merely followed their callings for a living, while they were speculating for their fortunes. There are no statistics which show how many Yankees went out West to buy a piece of land and make a farm and home, and live and settle, and die there. I think that not more than one-half per cent. of the migration from the East started with that idea; and not even half of these carried out the idea. The German immigrants, indeed, were better entitled to be called settlers; but all classes and people of all kinds became agitated and unsettled, and had their acquisitiveness perpetually excited by land speculations in some shape or other — new railways, roads, proposed villages and towns, gold mines, water-powers, coal mines — some opportunity or other of getting rich all at once by a lucky hit. . . .

The people of the West became dealers in land, rather than its cultivators. Scorning cheap clocks, wooden nutmegs, and apple-parers, the Yankee, stepping from the almost ridiculous to the decidedly sublime, went out West, and traded in the progress of the country. Every one of any spirit, ambition, and intelligence (cash

[1] *Ten Years in the United States.* By D. W. Mitchell (London, 1862), 325–9.

was not essential), frequented the National Land Exchange, a vast concern: extending from the Mississippi to the Pacific.

By convenient laws, land was made as easily transferable and convertible as any other species of property. It might and did pass through a dozen hands within sixty days, rising in price at each transfer; in the meantime producing buffaloes and Red Indians. Millions of acres were bought and sold without buyer or seller knowing where they were, or whether they were anywhere; the buyer only knowing that he hoped to sell his title to them at a handsome profit.

To keep up and encourage the great western staple, the Progress of the Country; to inflate as largely and rapidly as possible the magnificent bubble, public improvements were called for: canals and railroads were made or proposed, from the established centres of trade, commerce, and travel, to the indefinite West. Where was the money to come from to create these costly works, on a vast scale, in a savage territory, to give value to that territory on the Land Exchange? It was a grand problem, one would think, but really as simple as the discovery of America. Endow the railway with a few millions of acres of the lands it runs through and brings into the market; then sell these acres to pay for constructing the line, and to yield the shareholders their interest.

To extend and facilitate these land transactions, these speculations in the Progress of the Country, the system of selling land on time was adopted. The instalments of the purchase-money were made payable within various periods (frequently ten years) at low interest, in the first instance. Thus, A., after much thinking, and watching, and saving, or borrowing, secured a corner lot in his favourite city (that was to be), or his half-section in some future garden of the Union (often actually indicated in the deed of sale by the latitude and longitude); this he sold at a profit to B., on a few years' credit (secured, of course, by mortgage); B. did the same to C.; and so on.

It happened that, while this system was going on, the United States Government rewarded the services of those who had borne arms in the wars of the country, by giving them Land Warrants for 80, or 160, or 320 acres, according to services — in all amounting to many millions of acres. So in 1856 the railroad and canal companies and the holders of these Land Warrants were everywhere selling, selling, selling, in large or small parcels of land, until everybody in the West had a share of God's earth, quietly increasing in value at the rate of perhaps a hundred, or at least twenty per cent. per annum — it was hoped.

As an example of the effects of this real estate mania take Chicago. There land, for building purposes, was dearer than in the larger Eastern cities; and house-rent twice as much as in New York. In 1857 it is probable that upwards of eight hundred millions of dollars were invested in idle Western lands, and lots in proposed cities, which had been paid for to the extent of one-fourth, the remainder continually being paid in instalments.

Of course, this business, then, required a good deal of money, which was forthcoming — while prices were still rising. But the progress of speculation had got far ahead of its object or subject, the Progress of the Country.

The Western merchant or storekeeper came to New York, Boston, Philadelphia, bought goods on credit of the jobbers or importers, went home, sold them, and invested the proceeds in lands and lots. Land was becoming the circulating medium. The importers had to obtain an extension of time to pay the European manufacturer his dues — unless he would take a few sections of land in such and such a latitude and longitude.

Of course, such a business as this, engrossing the attention of perhaps a majority of the population, could not go on long. Unfortunately, the bankruptcy and misery that followed the long put-off day of settling accounts are already almost forgotten. The whole domestic history of the time, which ended in the panic of 1857, affords a striking illustration of the state of mind which has become habitual in the Northern States; the tendency to seize upon some project or idea, to dwell upon it, inflate it, make it into a mania, run it into the ground, as they say, and then forget all about it. But what is most important to consider is, that the leaders and promoters of these ruinous, demoralizing manias are, in public opinion, respectable, intelligent, and educated people.

C. *Early Land Speculation in Illinois, 1830–1840* [1]

The land speculation carried on in Illinois was perhaps typical of all similar enterprises of the times. Governor Ford of that state had an opportunity of seeing it in all its phases and describes it as follows:

In the spring and summer of 1836, the great land and town lot speculation of those times had fairly reached and spread over Illinois. It commenced in this State first at Chicago, and was the means of building up that place in a year or two from a village of a few houses,

[1] *History of Illinois.* By Thomas Ford (Chicago, 1854), 181–2.

to be a city of several thousand inhabitants. The story of the sudden fortunes made there, excited at first wonder and amazement, next a gambling spirit of adventure, and lastly, an all-absorbing desire for sudden and splendid wealth. Chicago had been for some time only one great town market. The plats of towns, for a hundred miles around, were carried there to be disposed of at auction. The eastern people had caught the mania. Every vessel coming west was loaded with them, their money and means, bound for Chicago, the great fairy land of fortunes. But as enough did not come to satisfy the insatiable greediness of the Chicago sharpers and speculators, they frequently consigned their wares to eastern markets. Thus, a vessel would be freighted with land and town lots, for the New York and Boston markets, at less cost than a barrel of flour. In fact, lands and town lots were the staple of the country, and were the only articles of export.

The example of Chicago was contagious. It spread to all the towns and villages of the State. New towns were laid out in every direction. The number of towns multiplied so rapidly, that it was waggishly remarked by many people, that the whole country was likely to be laid out into towns; and that no land would be left for farming purposes. The judgments of all our business men were unsettled, and their minds occupied only by the one idea, the all-absorbing desire of jumping into a fortune. As all had bought more town lots and lands than many of them could pay for, and more than any of them could sell, it was supposed that if the country could be rapidly settled, its resources developed, and wealth invited from abroad, that all the towns then of any note would soon become cities, and that the other towns, laid out only for speculation, and then without inhabitants, would immediately become thriving and populous villages, the wealth of all would be increased, and the town lot market would be rendered stable and secure.

D. *Land Speculation in Chicago in 1835* [1]

In no other part of the west was speculation in land carried on more industriously than in Chicago. Not only were the lots of that city and the adjoining farm lands objects of speculation, but Chicago became also a center where speculation in the lots of hundreds of prospective towns was carried on. Miss Martineau describes the activities there as follows:

Chicago looks raw and bare, standing on the high prairie above the lake-shore. The houses appeared all insignificant, and run up

[1] *Society in America.* By Harriet Martineau (London, 1837), I, 349–53.

in various directions, without any principle at all. A friend of mine who resides there had told me that we should find the inns intolerable, at the period of the great land sales, which bring a concourse of speculators to the place. It was even so. The very sight of them was intolerable; and there was not room for our party among them all. I do not know what we should have done, (unless to betake ourselves to the vessels in the harbour,) if our coming had not been foreknown, and most kindly provided for. We were divided between three families, who had the art of removing all our scruples about intruding on perfect strangers. None of us will lose the lively and pleasant associations with the place, which were caused by the hospitalities of its inhabitants.

I never saw a busier place than Chicago was at the time of our arrival. The streets were crowded with land speculators, hurrying from one sale to another. A negro, dressed up in scarlet, bearing a scarlet flag, and riding a white horse with housings of scarlet, announced the times of sale. At every street-corner where he stopped, the crowd flocked round him; and it seemed as if some prevalent mania infected the whole people. The rage for speculation might fairly be so regarded. As the gentlemen of our party walked the streets, store-keepers hailed them from their doors, with offers of farms, and all manner of land-lots, advising them to speculate before the price of land rose higher. A young lawyer, of my acquaintance there, had realised five hundred dollars per day, the five preceding days, by merely making out titles to land. Another friend had realised in two years, ten times as much money as he had before fixed upon as a competence for life. Of course, this rapid money-making is a merely temporary evil. A bursting of the bubble must come soon. The absurdity of the speculation is so striking, that the wonder is that the fever should have attained such a height as I witnessed. The immediate occasion of the bustle which prevailed, the week we were at Chicago, was the sale of lots, to the value of two millions of dollars, along the course of a projected canal; and of another set, immediately behind these. Persons not intending to game, and not infected with mania, would endeavor to form some reasonable conjecture as to the ultimate value of the lots, by calculating the cost of the canal, the risks from accident, from the possible competition from other places, &c., and, finally, the possible profits, under the most favorable circumstances, within so many years' purchase. Such a calculation would serve as some sort of guide as to the amount of purchase-money to be risked. Whereas, wild land on the banks

of a canal, not yet even marked out, was selling at Chicago for more than rich land, well improved, in the finest part of the valley of the Mohawk, on the banks of a canal which is already the medium of an almost inestimable amount of traffic. If sharpers and gamblers were to be the sufferers by the impending crash at Chicago, no one would feel much concerned: but they, unfortunately, are the people who encourage the delusion, in order to profit by it. Many a high-spirited, but inexperienced young man; many a simple settler, will be ruined for the advantage of knaves.

Others, besides lawyers and speculators by trade, make a fortune in such extraordinary times. A poor man at Chicago had a pre-emption right to some land, for which he paid in the morning one hundred and fifty dollars. In the afternoon, he sold it to a friend of mine for five thousand dollars. A poor Frenchman, married to a squaw, had a suit pending, when I was there, which he was likely to gain, for the right of purchasing some land by the lake for one hundred dollars, which would immediately become worth one million dollars.

There was much gaiety going on at Chicago, as well as business. On the evening of our arrival a fancy fair took place. As I was too much fatigued to go, the ladies sent me a bouquet of prairie flowers. There is some allowable pride in the place about its society. It is a remarkable thing to meet such an assemblage of educated, refined, and wealthy persons as may be found there, living in small, inconvenient houses on the edge of a wild prairie. There is a mixture, of course. I heard of a family of half-breeds setting up a carriage, and wearing fine jewellery. When the present intoxication of prosperity passes away, some of the inhabitants will go back to the eastward; there will be an accession of settlers from the mechanic classes; good houses will have been built for the richer families, and the singularity of the place will subside. It will be like all the other new and thriving lake and river ports of America. Meantime, I am glad to have seen it in its strange early days.

IV. English and American Agriculture Compared

Superiority of American Agriculture, 1833[1]

A good view of American agriculture may be had by comparing it with that of England. Each had its advantages and disadvantages, and they are stated by an observant English agriculturist as follows:

[1] *A Tour through North America.* By Patrick Shirreff (Edinburgh, 1835), 340–1, 345, 348–9.

In North America, extensive landholders are not common in any of the districts which I visited; and where they do exist, a great part of their possessions are unproductive. The soil is chiefly cultivated by its owners, who, in sundry respects, resemble the tenants of Scotland; and they often perform a great portion of the manual labour of the farm. In many parts of the country, which has been long settled, the farmers are opulent, participating in all the conveniences of life; and, without passing their time in absolute idleness, hire a good deal of labour. In the more recently settled parts, farmers have few of the elegancies and conveniences of life, with an ample share of its necessaries. They do not labour hard after the first three or four years of settlement, and seem to live without much care. Land does not invest its owner with any privilege or status in society.

Renters of land, or tenants, are common in many parts, and in all respects rank as landholders. The terms of rent are variable. Near towns, and in thickly-peopled districts, a small rent is paid in money, and a lease of several years taken. In remote situations, land is commonly let on shares from year to year. If the owner of the soil furnishes seed and labouring animals, he gets two-thirds of the produce, when on the field, and removed from the earth. If the tenant supplies animals and seed, the landowner gets one-third. But terms may vary according to situation, soil, and crop.

Farm-hired men, or by whatever other name they may be distinguished, are to be had in all old settled districts, and also in many of the new ones. In most cases their reward is ample, and their treatment good, living on the same kind of fare and often associating with their employers. A great deal of farm labour is performed by piece-work.

The agriculture of a country is affected by local circumstances, and farming in Britain and in the remote parts of America may be considered the extremes of the art. In the one country the farmer aims to assist, and in the other to rob nature. When the results of capital and labour are low, compared with the hire of them, they are sparingly applied to the cultivation of the soil, in which case nature is oppressed and neglected, if I may be allowed to use such terms; and when they are high, compared with their hire, she is aided and caressed. Both systems are proper in the respective countries; and, by assuming a fixed result for nature, they admit of arithmetical demonstration. Along the eastern shores of America, manures and a considerable portion of hired labour are applied to the cultivation

of the soil; but in remote districts manures are not used, and the smallest indispensable quantity of labour bestowed. In the eastern parts, the results of capital and labour enter into the productions of the soil; in remote districts the aid of capital can scarcely be said to have been called into action, and in both situations nature is the chief agent. . . .

In the eastern parts of America land may be purchased and stocked for nearly the sum an East Lothian farmer expends in stocking and improving a farm, namely, £7 per acre. But if the land has great local advantages, the price will be considerably higher. In the western parts of the United States, prairie land of the best quality, without the least obstacle to cultivation, and to any extent, may be had. For the sum of three hundred pounds sterling a farm of 200 acres could be bought and stocked in the prairies of western America. In East Lothian farming is a hazardous calling; in America there is no risk attending it. In East Lothian £2000 is required to stock a farm; in the Western States £300 will purchase and stock one nearly of equal size. In East Lothian a farmer has mental annoyance with bodily ease; in America he has mental ease with personal labour. In East Lothian a young farmer commences his career in affluence, and at middle age finds himself in poverty; in America he begins with toil, and is in easy circumstances by middle age. . . .

In judging then of the step of becoming an American agriculturist, all may lay their account to undergo considerable privations at first settlement, and lead a different life from the farmers of East Lothian. The bountiful reward which industry receives soon enables good men to purchase land; and it is therefore often the unsteady and idle which hire themselves to farmers. On this account, it will be necessary to work personally, by way of example and active superintendence. Right thinking people consider it no disgrace to labour in any part of the world, and it is thought quite disreputable to be idle in America. East Lothian farmers often toil mentally without remuneration; and the assurance that, while in America, all the fruits of a person's own labour, assisted by generous nature, accrues to himself, will nerve his arm and sweeten his toil. The division of labour so beautifully effected in some of the operations of East Lothian agriculture, and which I may be permitted to call professional luxuries, cannot be practised at present in America. The wooden dwelling-house and barns will at first perhaps appear revolting, and may induce some people to think, that, with the same privations and sacrifices, they

would have been enabled to have lived in East Lothian. Such is not, however, the case; because the pressure on farmers arises from a competition of numbers, which would be increased by lowering the standard of living; and the only result of such policy would be to raise the rent of land, and degrade all engaged in farming. Let no one, however, from my representations of American farming, entertain too sanguine hopes of success. Farming, in most parts of the world, ranks low in the scale of professional remuneration; and without virtue, persevering industry, and sobriety of character, people will not likely either become wealthy or happy. In nine cases out of ten, a man's success in life depends on his own exertions. America presents a fertile and extensive field, and whoever does not reap an abundant harvest, will, in all probability, find the cause of failure in his own character. I cannot hold out an immediate or ultimate prospect of great wealth, as the low price of produce and high labour renders this improbable. Every person may, however, obtain all the necessaries and most of the true comforts of life in the fullest abundance, unharassed by the cares of the present, or apprehensions of the future. The pleasures of society are not likely to be so much enjoyed in America as in Britain; but, on the other hand, its mortifications are escaped. In every part of the world, man ought to look to his family and himself, and not to society, for true happiness. If abundance of the necessaries of life do not ensure society in America, the want of abundance is almost sure to lose society in Britain.

V. Agricultural Education and Machinery

Improvements before 1860 [1]

The two important improvements in the methods of agriculture during this period were the organization of agricultural societies and the application of machinery to agriculture. In fact, the two went hand in hand, for the former encouraged with prizes and bonuses the invention of farm machinery. The introduction of labor-saving machinery on the farms increased the production of the soil and eventually freed a large part of the population for manufactures. By the old methods the greater part of the people were required to engage in the production of foodstuffs, but with the coming of machinery, one worker with less labor could produce as much as several workmen could formerly produce. These two great developments have been well described by Charles L. Flint, a well-known authority on American agriculture, as follows:

[1] *Report of the Commissioner of Agriculture for the Year 1872* (Washington, 1872), 282–4, 286–91.

During the period of the Revolution farm production was brought to a partial stand-still, and, for some years after, it was in a state of extreme depression. It took time to recover from the effects of the struggle. Gradually, however, the importance of some effort to develop and improve the agriculture of the country was impressed upon the minds of the more intelligent and public-spirited of the people, men, for the most part, who were in advance of their time. The result of their deliberations was the formation of societies for the encouragement of agricultural improvement. Thus the South Carolina Agricultural Society was established in 1784; the Philadelphia Society for Promoting Agriculture, in 1785; the New York (city) Society, in 1791; the Massachusetts Society for Promoting Agriculture, in 1792. These were rather city than country institutions. They were very slow in reaching the common people. The average farmer of that day was not up to their standard of thought and observation. Their example, their teachings, their entreaties for aid, their reports and papers, fell comparatively dead upon the mass of the people. Farmers were not to be taught by men who never held the plow. They did not want anything to do with *theories*. Custom had marked out a road for them, and it was smooth and easy to travel, and, though it might be a circle that brought up just where it had started, it had the advantage, in the old farmer's mind, that in it he never lost his way. It didn't require any exertion of mind. His comfort, as well as his happiness, was based on a feeling of filial obedience to old usage that was hereditary in his being. It was born in the blood, and ruled him with an irresistible power. His field of vision was bounded and narrow, and his work was strictly *imitative*, so far as he could see, and in no way *experimental*. The old common law, based on precedent, custom, practice, was his guide and his rule. He would be governed by custom, not by reason. If ancient custom was *known*, that was good enough for him. It wasn't for him to doubt. To investigate would imply doubt. To investigate was to theorize. Theory is at the bottom of all investigation, and theory was a bugbear in his mind. The logical result — that no improvement could be reached without investigation — had no terrors for him. He seldom read. The *written* word he received with distrust. It might contain principles, and it wasn't principles that he cared anything about, but *practice*. No matter whether founded on wisdom and experience or not, practice was the thing.

It is probable that the events and the excitements of the Revolution itself, with the travel, the observation, and the social intercourse

which it involved, had much to do with breaking up the impregnable barrier of prejudice and slavery to custom and precedent which ruled so strongly in the popular mind. Great passions which reach and stir up the lowest depths of the nation's heart have a liberalizing and progressive influence. They excite thought and awaken a spirit of inquiry. But that the picture is not in the least overdrawn is evident from the fact that here and there are a few specimens left to remind us that the leaven which the early societies infused among the people has not yet permeated the entire mass.

But time brings its changes. Something more was felt to be needed, and a convention was held in Georgetown, in the District of Columbia, on the 28th of November, 1809, from which grew the Columbian Agricultural Society for the Promotion of Rural and Domestic Economy; and the first exhibition, probably, in this country, was held by that society on the 10th of May, 1810, with the offer of liberal premiums for the encouragement of sheep-raising, &c. Elkanah Watson exhibited three merino sheep in Pittsfield, Massachusetts, in the October following of the same year. It was an innovation upon old custom, and the occasion of much ridicule and contempt among the farmers of that day and generation, but it was the germ of the Berkshire County Agricultural Society, whose regular exhibitions began the year following, and are believed to have been the first county exhibitions ever instituted in this country.

The Massachusetts Society held its first exhibition at Brighton in 1816, offered a list of premiums, and instituted a plowing-match; but it appears to have been rather with the design of testing the strength, training, and docility of the oxen than to improve the plow. The plow-maker, however, happened to be there with his eyes open, and there can be no doubt that this and similar exhibitions which soon followed gave a new impetus to the progress of agricultural mechanics. Improvements in the plow had begun, even before the close of the last century. A patent had been granted for a cast-iron plow to Charles Newbold, of Burlington, New Jersey, in 1797, combining the mold-board, share, and land-side, all cast together, and it was regarded by intelligent plow-makers as so great an improvement that Peacock, in his patent of 1807, paid the original inventor the sum of $500 for the right to combine certain parts of Newbold's plow with his own. The importance of this implement was so great as to command the attention and study of scientific men, to improve its form and construction, and Thomas Jefferson, in 1798, applied himself to the task, and wrote a treatise upon the

requisite form of the mold-board, according to scientific principles, calculating the exact form and size, and especially the curvature to lessen the friction. I have in my possession his original manuscript of this essay, containing his drawings and calculations.

But these changes and improvements were not readily adopted by the farming community. Their introduction was far slower than any new invention that promised to economize labor and do better work would be at the present day. Many a farmer clung to his old wooden plow, asserting that cast iron poisoned the ground and spoiled the crops. He required an ocular demonstration before paying his money for an iron plow. It was not so much the weight of the old plow as the form of the mold-board, and the construction of the various parts, that needed correction. Its draught was great, on account of the excessive friction. The share and mold-board were so attached as to make too blunt a wedge. Its action was not uniform, and it was difficult to hold, requiring constant watchfulness and great strength to prevent it from being thrown out of the ground. To plow to any considerable depth it was necessary to have a man at the beam to bear down. The mold-board was often shod with iron to lessen the friction and prevent wear, but it was usually in strips, often of uneven thickness, so that the desired effect was not always attained. The cast-iron plow remedied these serious defects, and secured at least some greater uniformity in construction. The modifications of the mold-board, which resulted from a better understanding of the true principles of construction, have enabled the farmer to do vastly better work, and a greater amount of it in the same time, and at a less expenditure of strength, and to reap larger crops as the result of his labor, while the cost of the implement, considering its greater efficiency and its durability, is less by half, probably, than the old wooden plow.

There can be no doubt that the saving to the country from these improvements in the plow, within the last century, amounts to many millions of dollars a year in the cost of teams, and some millions in the cost of plows, or that the aggregate of crops has been increased by them many millions of bushels. The plow has also been modified to adapt it to a much greater variety of soils. In the mode of manufacture, too, a vast improvement has taken place. Half a century ago it was made sometimes on the farm, sometimes by the village blacksmith, and the wheelwright. The work is now concentrated in fewer establishments which make it a specialty. In Massachusetts, for example, in 1845, there were seventy-three plow-manufactories,

making 61,334 plows and other instruments annually, while in 1855 the number of establishments had decreased to twenty-two, which made 152,686 plows, valued at $707,175.86, annually. A very large plow-factory was established in Pittsburgh, Pennsylvania, in 1829, and, as early as 1836, it was manufacturing as many as a hundred plows a day, by the aid of steam-power, to supply chiefly the southern market. This establishment first made a hill-side revolving-beam plow, and the iron-center plow, and more recently it has made a vast number of steel plows, adapted to the prairie soils of the West. Another factory, in the same city, as early as 1836, made plows at the average rate of 4,000 a year. The two factories made 34,000 plows a year, valued at $174,000. There are now many other still larger factories, some of which make from ten to twelve hundred different patterns, adapted to every variety of soil and circumstance. . . .

But perhaps the most important of modern agricultural inventions are the grain-harvesters, the reapers, the mowers, the thrashers, and the horse-rakes. The sickle, which was in almost universal use till within a very recent date, is undoubtedly one of the most ancient of all our farming implements. Reaping by the use of it was always slow and laborious, while from the fact than many of our grains would ripen at the same time, there was a liability to loss before they could be gathered, and practically there was a vastly greater loss from this cause than there is at the present time. It is not, therefore, too much to say that the successful introduction of the reaper into the grain-fields of this country has added many millions of dollars to the value of our annual harvests, by enabling us to secure the whole product, and by making it possible for the farmer to increase the area of his wheat-fields, with a certainty of being able to gather the crop. Nothing was more surprising to the mercantile community of Europe than the fact that we could continue to export such vast quantities of wheat and other breadstuffs through the midst of the late rebellion, with a million or two of able-bodied men in arms. The secret of it was the general use of farm-machinery. The number of two-horse reapers in operation throughout the country, in the harvest of 1861, performed an amount of work equal to about a million of men. The result was that our capacity for farm production was not materially disturbed.

The credit of the practical application of the principles involved in this class of machines undoubtedly belongs to our own ingenious mechanics; for though somewhat similar machines were invented in

England and Scotland many years ago, they had never been proved to be efficient on the field, and had never gained the confidence of the farmers, even in their neighborhood; while the patent issued to Obed Hussey, of Cincinnati, in 1833, and another issued to McCormick of Virginia, in 1834, not only succeeded in the trials to which they were subjected, but gained a wide and permanent reputation. Many patents had been issued in this country previously, the first having been as early as 1803, but they had not proved successful. Hussey's machine was introduced into New York and Illinois in 1834, into Missouri in 1835, into Pennsylvania in 1837, and in the next year the inventor established himself in Baltimore. McCormick's machine had been worked as early as 1831, but it was afterwards greatly improved, and became a source of an immense fortune to the inventor. He took out a second patent in 1845, fifteen other machines having been patented after the date of his first papers, including that of the Ketchum, in 1844, which gained a wide reputation.

The first trial of reapers, partaking of a national character, was held under the auspices of the Ohio State Board of Agriculture in 1852, when twelve different machines and several different mowers were entered for competition. There was no striking superiority, according to the report of the judges, in any of the machines. A trial had been held at the show of the New York State Agricultural Society, at Buffalo, in 1848, but the large body of farmers who had witnessed it were not prepared to admit that the work of the machines was good enough to be tolerated in comparison with the hand-scythe. Some thought they might possibly work in straight, coarse grass, but in finer grasses they were sure to clog. The same society instituted a trial of reapers and mowers at Geneva in 1852, when nine machines competed as reapers and seven as mowers. Only two or three of the latter were capable of equaling the common scythe in the quality of work they did, and not one of them all, when brought to a stand in the grass, could start again without backing to get up speed. All the machines had a heavy side-draught, some of them to such an extent as to wear seriously on the team. None of them could turn about readily within a reasonable space, and all were liable to tear up the sward in the operation. The old Manning, patented in 1831, and the Ketchum machines were the only ones that were capable of doing work that was at all satisfactory. One or two of the reapers in this trial did fair work, and the judges decided that, in comparison with the hand-cradle, they showed a saving of $88\frac{3}{4}$ cents per acre. Here was some gain certainly, a little positive advance, but still most

of the reapers, as well as the mowers, did very inferior work. The draught in them all was very heavy, while some of the best of them had a side-draught that was destructive to the team.

The inventive génius of the country was stimulated by these trials to an extraordinary degree of activity. Patents began to multiply rapidly. Local trials took place every year in various parts of the country to test the merits of the several machines. The great International Exposition at Paris in 1855 was an occasion not to be overlooked by an enterprising inventor, and the American machines, imperfect as they were at that time, were brought to trial there in competition with the world. The scene of this trial was on a field of oats about forty miles from Paris, each machine having about an acre to cut. Three machines were entered for the first trial, one American, one English, and a third from Algiers, all at the same time raking as well as cutting. The American machine did its work in twenty-two minutes, the English in sixty-six, and the Algerian in seventy-two.

At a subsequent trial on the same piece, three other machines were entered, of American, English, and French manufacture, when the American machine did its work in twenty-two minutes, while the two others failed. "The successful competitor on this occasion," says a French journal, "did its work in the most exquisite manner, not leaving a single stalk ungathered, and it discharged the grain in the most perfect shape, as if placed by hand, for the binders. It finished its piece most gloriously." The contest was finally narrowed down to three machines, all American. Two machines were afterwards converted from reapers into mowers, one making the change in one minute, the other in twenty. Both performed their task to the astonishment and satisfaction of a large concourse of spectators, and the judges could hardly restrain their enthusiasm, but cried out, "Good, good!" "Well done!" while the excitable people who looked on hurrahed for the American reaper, crying out, "That's the machine!" "That's the machine!" The reporter of a French agricultural journal said: "All the laurels, we are free to confess, have been gloriously won by Americans, and this achievement cannot be looked upon with indifference, as it plainly foreshadows the ultimate destiny of the New World."

Five years after the Geneva trial there was a general desire to have another on a scale of magnificence that should bring out all the prominent reapers and mowers of the country. The United States Agricultural Society accordingly instituted a national trial at Syracuse,

New York, in 1857. More than forty mowers and reapers entered, and were brought to test on the field. It was soon apparent that striking improvements had been made since the meeting at Geneva. The draught had been very materially lessened in nearly all the machines, though the side-draught was still too great in some of them. Most of the machines could now cut fine and thick grass without clogging, and there was a manifest progress in them, but of the nineteen that competed as mowers, only three could start in fine grass without backing to get up speed. The well-known Buckeye, patented only the year before, won its first great triumph here, and carried off the first prize. . . .

The horse hay-rake was invented at an earlier date than the mowing-machine. It has been used in this country nearly seventy years, and the saving by its use, sixty years ago, was estimated to be the labor of six men in the same time. The work to be performed in raking hay, though slow, is comparatively light. It does not require the exertion of a very great amount of strength. It is just such kind of work where the application of animal power becomes of the greatest advantage, because it multiplies the efficiency of the hand many times. The same thing is noticed in the use of the hand-drills for sowing small seeds, the tedder for turning and spreading hay, and in other similar operations. The labor of a good horse-rake is equal to that of eight or ten men for the same time, and from twenty to thirty acres a day can be gathered by a single horse and driver, and that without overexertion. In the economy of labor the horse-rake must be regarded as second only in importance to the mower and the reaper, and is considered as essential upon the farm as the plow itself.

The tedder is another invention of still more recent date. With the introduction of the mower, by which grass could be cut so rapidly, and the horse-rake, by which it could be gathered more rapidly than ever before, there was still wanting some means by which it could be cured proportionally quick, something to complete and round out the new system, as it were, to make the revolution of the process of hay-making entire. Various forms of the tedder had been patented and used in England, but they were too heavy and cumbersome for American use, and it was left to our own inventors to meet and overcome the mechanical obstacles in the way of success here. This they have done, and we have so far economized labor in this direction, that the tedder is now regarded as of nearly equal importance with the mower and the horse-rake.

To these appliances for lightening and shortening the labors of haying, have been added many forms of the horse-fork for unloading and mowing away hay in the barn or upon the stack. Few machines have met with greater popular favor than the horse pitchfork, for it saves not only the most violent strain upon the muscles, but economizes time, which, in the hurry of haying, is often of the utmost importance. The American hand-forks had been brought so near perfection, by their high finish, lightness, and strength, as to leave little to be desired, but the horse-fork has been so generally introduced, as, to a considerable extent, to supersede their use.

While these vast improvements have been going on with the other implements of the farm, the improvement in machines for thrashing grain has been rapidly progressing, till they have reached a wonderful degree of perfection. Most of us can remember when the old-fashioned flail was heard upon almost every barn-floor in the country. Here and there was a case where the grain was trodden out by cattle, with an amazing waste of time and labor. Compare those slow methods with the process, widely known at the present day, by which a horse-power or steam-power thrasher not only separates the grain but winnows it, measures it, bags it, ready for market, and carries away the straw to the stack at the same operation, and all with a rapidity truly astonishing. As early as the Paris Exposition of 1855 the victory was won by an American machine. To ascertain the comparative rapidity and economy of thrashing, six men were set to work at thrashing with flails. In one hour they thrashed 36 liters of wheat. In the same time Pitt's American machine thrashed 740 liters; Clayton's English machine thrashed 410 liters; Duvoir's French machine thrashed 250 liters; Pinet's French machine thrashed 150 liters. Speaking of this trial a French journal said: "This American machine literally devoured the sheaves of wheat. The eye cannot follow the work which is effected between the entrance of the sheaves and the end of the operation. It is one of the greatest results which it is possible to attain. The impression which the spectacle produced on the Arab chiefs was profound." Good as that machine was at that time, it has been greatly improved since then; and it is a fact that wherever our first-class machines have come into competition with those of European manufacture, they have invariably proved themselves superior in point of simplicity, rapidity, and perfection of work.

Nor has the progress in the improvement of other indispensable machines of the farm been less marked and important. The smaller

implements have felt the impress of the mechanical genius of the age. The corn-sheller has been brought to such perfection as to separate the corn from the ear with great rapidity and with the application of little power. It has been adapted to horse power also, and to different sections of the country, where different varieties of corn are raised, and to shell one or two ears at the same time. Its economy of time and labor is such as, upon large farms where the product is large, to pay for itself in a single year.

The hay-cutter is another machine of modern invention. Wherever a large stock of cattle is kept, especially where a considerable number of horses are wintered, it is often thought to be good economy to feed out more or less of the coarser feeding substances of the farm, as straw, corn-stover, the poorer qualities of hay, &c., by mixing them, either with the better qualities of hay or with some sort of concentrated food, like meal. The hay-cutter is adjustable so as to cut at different lengths, according to the wants of the stock for which it is designed. The point is to cut short and with perfect regularity, and when this quality is attained in a machine, uniting strength, simplicity, durability, and safety to the operator, it is estimated that there is a gain of about 25 per cent. in the economy of feeding, in the increase of thrift secured, and the positive advantage to be derived in the manure. There is a difference of opinion upon this point, to be sure, but notwithstanding that, the use of some form of the hay and straw cutter has become nearly universal and is generally regarded as quite indispensable upon most well-conducted farms. Machines for this purpose are made to be worked by hand, upon small farms, and by horse or steam power upon larger ones, where they are capable of reducing to chaff a ton and a half of hay or straw per hour.

VI. Views on Agriculture

A. *Southern and Northern Agriculture Compared, 1840, 1850, 1860*[1]

The United States, before the war, was essentially an agricultural nation. Both the north and the south had their chief interests in the soil, and any acceleration or retardation, therefore, of its development along this line was of the greatest importance. The relative importance of the two sections of the country was as follows:

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[1] *Hunt's Merchants' Magazine* (New York, 1860), XLII, 168–70.

EXPORTABLE PRODUCTS OF THE SOUTH.

	1820	1830	1840	1850	1859
Naval stores	$ 292,000	$ 321,019	$ 602,520	$ 1,142,713	$ 3,695,474
Rice	1,714,923	1,986,824	1,942,076	2,631,557	2,207,148
Tobacco	8,118,188	8,833,112	9,883,957	9,951,023	21,074,038
Sugar	1,500,000	3,000,000	5,200,000	14,796,150	31,455,241
Cotton	26,309,000	34,084,883	74,640,307	101,834,616	204,104,923
Total	$37,934,111	$48,225,838	$92,268,860	$130,356,059	$262,546,824
Number hands	1,543,688	2,009,053	2,487,355	3,119,509	4,000,000
Product per hand	$24½	$22½	$37	$43½	$65.6

The figures for naval stores, rice, and tobacco are the export values of the crops. The sugar and cotton are the values of the whole production.

The result is, that the value per head of these articles, which increased 16 per cent from 1840 to 1850, increased 50 per cent in the last nine years. It must not, however, be supposed that this was all the products of that section. On the other hand, the production of those exported articles formerly involved the purchase of food for the hands employed in the production. At present a large portion of food is raised by the same hands in addition. This is a most interesting feature of Southern industry, yet but little understood. There have been no general returns of production since 1850, but we may compare the products of leading articles as given by the census of 1850:—

	1840		1850	
	North	South	North	South
Area	.....	.....	1,578,737	871,458
Population	.....	.....	13,527,229	9,664,656
Wheat ..... bush.,	54,748,284	30,074,998	72,607,129	27,878,815
Corn	124,988,073	252,543,802	243,013,603	349,057,501
Swine	10,084,970	16,216,323	10,343,265	20,008,948
Horses	2,097,307	2,238,362	2,284,344	2,052,375
Mules			40,341	518,990
Hay	9,402,097	846,111	12,815,484	1,023,158
Cows	7,569,022	7,402,564	3,481,617	2,833,338
Oxen			878,366	822,078
Other cattle			4,224,628	5,469,441

These figures present facts somewhat different from the popular idea, which is, that for articles of general agriculture the North and West are much in excess of the South. The leading items of food and labor at the South, as at the North and West, are cattle, horses, mules, swine, and corn; "bacon and corn cakes," "hog and hominy" are the staples. Now the census figures show that in addition to the great export crops the South raises far more corn and pork than the other sections. The South had, in 1850, absolutely double the number of swine that the other sections held. It raised 109,000,000 bushels more corn than the whole North and West. It raised 100 bushels of corn for every black hand. The wheat was less in actual quantity; but there were raised five bushels of wheat for every white person, which is the same ratio as at the North. The South had more cattle of all kinds than the other section, and it is enabled to maintain them, because it is not compelled to house or make hay for the winter fodder, which are heavy drafts upon Northern labor imposed by the climate. The South had horses and mules, 2,571,365, and the North 2,324,685, an excess of 246,680 in favor of the South, and yet the latter States raised only 10 per cent of the hay that was raised at the North. Allowing the actual cost of making hay, in labor, &c., to be $5 per ton, the same number of cattle cost the North $44,000,000 more to keep them than at the South. The hay expense is, however, shared with the cattle of all kinds. These must be fed in the winter at the North, and that is not required at the South. In all that concerns agricultural prosperity the South has a decided advantage. The larger production of hay at the North has sometimes been appealed to as an evidence of its greater agricultural wealth, whereas it is only an evidence of a more disadvantageous climate. The Southern cattle obtain the same quantity of food as those of the North, that is, a quantity sufficient for their wants, but they obtain it themselves. Nature has it always ready for them. At the North, on the other hand, men have to cut the food in the summer, cure and preserve it for the winter, when the Northern animals could not get it for themselves. Analogous to this is the Northern coal industry. The South produces comparatively a small quantity, and needs but little in proportion to the requirements of a Northern winter. If the $35,000,000 worth of coal mined at the North is an evidence of wealth, it is also an evidence of the exactions of the climate. Nearly all the industry expended in coal mining and hay making is a tax upon Northern life, rather than an evidence of wealth. That portion of coal which is applied to transportation and manufactures is, of course, an element

of production, but that used as fuel is a tax. The labor that, with a climate as severe as that at the North, would be required at the South to supply fuel and fodder, is now expended in raising cotton, sugar, and rice for export. If we compare the weight and value of the articles, cotton, butter, cheese, tobacco, sugar, wool, rice, hemp, and flax, North and South, the results are as follows:—

Nine articles	Quantity	Value
Northern States.....lbs.....	2,292,054,661	$ 72,294,524
Southern States..... "	2,896,100,602	142,480,235
Excess at the South.....	.....	$70,195,711

In these figures we find how rapidly the Southern States have concentrated within themselves the means of feeding the large working population, while they have been enabled to throw off from the same working force an annual surplus of those articles suitable for export; and in doing this it has more distinctly marked its position as the sole source for the supply of that great raw material for human clothing, the manufacture of which occupies so large a proportion of the population and capital of England and Europe. Not only the quantity of cotton per hand is as we have seen increasing, but its money value advances in the ratio of the spread of the markets for the goods and the prosperity of the people who buy in those markets. The production of this article increases in the ratio of the natural increase of the hands and of the larger quantities that they can raise. The progress of the United States crop has been in quantity, and in the average value at Liverpool, in the two last periods of eight years, as follows:—

	Bales	Ave. price	Value
1844 a 1851.....	18,132,293	5¼d.	$ 875,789,519
1852 a 1859.....	25,488,014	6¼d.	1,436,587,562
Increase.....	7,355,791	....	$560,798,043

Such has been the vast results of this cotton product in the last eight years; an increase of 40 per cent in quantity was attended by an increase of 20 per cent in price, and there results an increase of 70 per cent in net proceeds. The next eight years indicate a still more considerable progress in the same direction.

B. *Agriculture about 1860* [1]

A good account of American agriculture at the outbreak of the Civil War is given by an English authority as follows:

A large portion of the United States still remains uncultivated, mostly because it has not yet been occupied. Land is still so plentiful in proportion to the population and capital, that rent has scarcely begun to have any existence, the farmer being in almost every case proprietor of the land which he cultivates.

The science of farming has been so much extended and improved of late years, that it is gradually giving to the United States a rank as one of the most carefully tilled countries in the world. It appears from the returns of the last census, that the ratio of the increase of the principal agricultural products of the United States has more than kept pace with the increase of the population, and a marked improvement has taken place in the more important agricultural operations.

The spirit of inquiry and enterprise in agriculture was never more general or encouraging than at the present time. Societies have been established in all the States for the purpose of collecting and rendering as useful as possible all the information relative to agriculture, and in Massachusetts a department of the State Legislature has been organized for the superintendence of the agricultural interests of the State.

The Middle States, especially New York, have attained a high degree of improvement, consequent upon the efforts made to raise the standard of agriculture.

The Western States are more strictly agricultural than any other section, and Chicago and other towns owe their existence entirely to the mammoth trade in Indian corn, wheat, and other farm products supplied by the surrounding country.

The Southern States, while their main products are cotton, rice, tobacco, and sugar, also produce cereals in large quantities.

The farms in the States and Territories contain in the aggregate 163,261,389 acres improved, and 246,508,244 acres unimproved lands. The unimproved land consists of that which is occupied and necessary to the enjoyment of the improved, though not itself reclaimed; it does not include meadow land. The average size of farms is 203

[1] *Descriptive Handbook of America.* By George Washington Bacon and William George Larkins (London, [1866]), 42–9.

acres, the greatest average being in California (4466 acres), and the smallest in Utah (51 acres). The greatest average values of farms are in the District of Columbia, Louisiana, and New Jersey; and the smallest average values in Utah, New Mexico, and Arkansas.

The average value of land per acre in New England is $20.27 c.; in the Middle States, $28.07 c.; in the Southern States, $5.34 c.; in the South-Western States, $6.26 c.; in the North-Western States, $11.39 c.; in California and the organized Territories, $1.89 c.; in Texas, $1.44 c. The proportion of the improved land to the whole in the Free States is 14.72 per cent.; in the Slave States, 10.09 per cent.; in the United States, 7.71 per cent. The proportion of occupied land to the whole in the Free States is 28.56 per cent.; in the Slave States, 33.17 per cent.; in the United States, 20.02 per cent. The average value of occupied land per acre in the Free States is $19; in the Slave States, $6.09 c.; in the United States, $11.14 c.

In general it may be said that the Middle and Western States are most productive in wheat, rye, and oats; the Southern and Western in Indian corn; and the Southern in cotton, sugar, tobacco, and rice. Wool and Irish potatoes are raised principally north of lat 34°; tobacco between 34° and 41°; barley, apples, and pears, north of 38°; hemp, flax, and hops, north of 34°; cotton between 31° and 36°; sugar south of 31°.

The quantity of wheat grown in 1859 amounted to 171,183,381 bushels. In many States the quantity grown has exceeded the means of ready transportation, or the demands of the market. It is, however, to the extended cultivation of spring wheat in the North-Western States, that the increase — which has been at the rate of 70 per cent. in ten years — is due. The greatest wheat-producing State is Illinois; then come Wisconsin, Indiana, Ohio, Virginia, Pennsylvania, New York, Iowa, and Michigan. The prairie States yield the largest crops.

Maize, or Indian corn, furnishing at once food for man, food for beast, and manure for the land, is cultivated in every State and Territory of the Union, and is undoubtedly the popular crop, receiving the distinctive name of "corn." It is less liable to failure than any other. In 1859, the crop was 830,541,707 bushels, showing an increase of 40 per cent. since 1849. A large quantity is shipped to Great Britain, and every year increases the demand.

Barley, oats, rye, buckwheat, and flax, are grown in every part of the United States — principally in New York. Hemp is chiefly raised in New York, Kentucky, and Missouri. The total product for 1860

being 83,000 tons of dew-rotted hemp, and about 4000 tons water-rotted.

Cotton, the great staple of the Union, is chiefly a product of the South. It is the produce of the herbaceous or annual cotton plant, and is of two kinds — the Sea Island or long staple, and the upland or short staple. The former, which is of superior quality, is grown chiefly in the Carolinas and Georgia, on the Atlantic, and in some parts of the State of Texas. Cotton was first planted in the United States in or about 1787, and was first exported in small quantities in 1790. Since then its culture has become enormous, and the rapidity with which it has been developed is truly wonderful. In the beginning of the present century, the annual exportation was less than 5000 bales, in 1859 it had increased to 5,196,944 bales, of 400 pounds each. The whole crop is the product of thirteen States, but is chiefly obtained from eight of them. Immense as is the quantity produced, the demand is equal to the supply. The civil war has led to a temporary cessation of the trade, which, now that peace is restored, will doubtless speedily regain its activity. Prior to the production of cotton in such vast quantities in the more Southern States, it was extensively cultivated for domestic purposes in North Carolina, Virginia, Maryland, Delaware, and Southern Illinois; and it is not improbable that its cultivation may be re-established in some of these States, with profit to the producer and advantage to the consumer. The number of plantations in which upwards of five bales were produced was, in the year 1859, 74,031.

The dairy products of the United States are large. Considerable quantities are shipped yearly to Great Britain. The quantity of butter produced in the year 1859–60 was set down at 460,509,854 pounds; and the production of cheese reached 105,875,135 pounds.

Although large quantities of sugar and molasses are imported into the United States, the product of cane sugar in 1859 was 302,205 hogsheads; and of molasses 16,337,080 gallons — Louisiana being the State where the great bulk of American sugar is produced. A large quantity of sugar is obtained from several species of the maple tree, that yielding the richest juice being the rock or sugar maple. The manufacture is said to have originated in New England in 1752, and extended from thence into the North-Eastern States, where the tree principally abounds. It is found in beautiful groves, called sugar orchards; and in the months of February and March, when the days grow warm and the nights are frosty, the trees are bored with augurs about two feet from the ground, and from the holes thus made the

sap exudes, and is collected in wooden troughs, and boiled on the spot. The quantity of maple sugar made in 1859 was 302,205 hogs-heads.

Sorghum, a species of grass, commonly known as Indian millet, produces a saccharine juice, which in 1856 began to attract attention. In 1859, less than four years from its introduction, the plant had become a most important agricultural staple. It thrives wherever Indian corn will grow. It may be cultivated in the same manner. When fully grown, it is from 6 to 18 feet high; the stalks of 1 to 2 inches diameter. The stalks yield on an average about 50 per cent. of their weight in juice, or, to the acre, from 150 to 400 gallons, and about 12 per cent. of sugar. Excellent rum is made from the seeds.

In the production of tobacco, every State and Territory has a share, the principal coming from Virginia, Kentucky, and Maryland, where it has been the staple since their first settlement; and it is also extensively grown in Kentucky, Ohio, Missouri, and other States. Besides the quantities required for domestic use, large amounts are exported. Several of the Northern States are showing a considerable increase in the growth of this staple. In 1859, the total produce was 429,390,771 pounds. There are upwards of 15,745 plantations on which 3000 pounds or more are raised.

The hay crop of 1859 was 19,129,128 tons. This crop is mainly confined to the Northern States. In the Southern States, the weather is so mild as to allow cattle to graze during the greater portion of the year, rendering a hay harvest less necessary. The estimated value of the above crop is upwards of $150,000,000.

Rice was first cultivated in South Carolina in 1694, and four years afterwards, 60 tons were shipped to England. Since that time, it has been so successsfully culivated, that in 1860 it reached 190 millions of pounds. South Carolina and Georgia are the principal producers out of the sixteen States in which it is grown. A large amount is exported.

Hops are principally cultivated in New York, though every State and Territory, with the exception of Florida, New Mexico, and Dacotah, contributed to the crop of 1860, which amounted to upwards of 10 millions of pounds.

Potatoes are raised in every part of the Union, the Irish potato principally in the Northern, and the sweet potato chiefly in the Southern section. The yield for 1860 was upwards of 110 millions of bushels of the former, and 35 millions of the former [latter?]

The last returns upon the subject of wine making show a large increase in an article which promises to become one of great com-

mercial value. The wine culture has increased in a number of States, but more particularly in Ohio, California, and Kentucky. These three States made nearly one million of the 1,860,008 gallons reported in 1860.

The orchard products of the United States consist principally of apples and pears, of which the value in 1860 was nearly 20 millions of dollars, showing an increase in ten years of about 12 millions of dollars; an increase owing to the great attention which has been paid to the introduction and cultivation of improved varieties of fruit, and the processes of preservation by artificial means, which now employ a large amount of capital.

The number of acres devoted to the different crops in 1860 were — hay and pasturage, 33,000,000; Indian corn, 31,000,000; wheat, 11,000,000; oats, 7,500,000; cotton, 5,000,000; rye, 1,200,000; peas and beans, 1,000,000; Irish potatoes, 1,000,000; sweet potatoes, 750,000; buck-wheat, 600,000; tobacco, 400,000; sugar, 400,000; barley, 300,000; rice, 175,000; hemp, 110,000; flax, 100,000; orchards, 500,000; gardens, 500,000; vineyards, 250,000; miscellaneous, 1,000,000.

The largest average crop per acre of wheat, was in Massachusetts, 16 bushels; the smallest, in Georgia, 5 bushels. Of rye, largest, Ohio, 25 bushels; smallest, Virginia, 5 bushels. Of Indian corn, largest, Connecticut, 40 bushels; smallest, South Carolina, 11 bushels. Of oats, largest, Iowa, 36 bushels; smallest, North Carolina, 10 bushels. Of rice, Florida, 1850 lbs., South Carolina, 1750 lbs., Louisiana, 1400 lbs. Of tobacco, largest, Missouri, 775 lbs.; of seed cotton, largest, Texas, 750 lbs.; of Irish potatoes, largest, Texas, 250 bushels; smallest, Alabama, 60 bushels; of sweet potatoes, largest, Georgia, 400 bushels.

The value of the live stock and domestic animals forms an important item in the statistics of the country. A most satisfactory increase in the number and varieties is shown by the last returns. The total value of the live stock was, in 1860, $1,107,490,216. The horses numbered 6,115,458; asses and mules, 1,129,553; working oxen, 2,240,075; milch cows, 8,728,862; other cattle, 14,671,400; swine, 32,555,367. The number of sheep returned in the last census of 1860 was 23,317,756, and the amount of wool 60,511,343 lbs. In addition to the number of sheep just given, it was reported that about 1,505,810 were not included in the returns, being owned by other than farmers. The total increase of sheep in ten years was 1,594,536.

CHAPTER XV

CURRENCY, BANKING, AND STATE DEBTS, 1791–1860

I. The First United States Bank

A. *Hamilton's Views on the Bank, 1790* [1]

Among Alexander Hamilton's plans for placing the new government on a sound financial basis, none was more important than the one which had for its end the establishment of a United States Bank. Accordingly, in 1790, he submitted to Congress a plan for such a bank, and gave his reasons for his act as follows:

The establishment of banks in this country seems to be recommended by reasons of a peculiar nature. Previously to the Revolution, circulation was in a great measure carried on by paper emitted by the several local governments. In Pennsylvania alone, the quantity of it was near a million and a half of dollars. This auxiliary may be said to be now at an end. And it is generally supposed that there has been, for some time past, a deficiency of circulating medium. How far that deficiency is to be considered as real or imaginary, is not susceptible of demonstration; but there are circumstances and appearances, which, in relation to the country at large, countenance the supposition of its reality.

The circumstances are, besides the fact just mentioned respecting paper emissions, the vast tracts of waste land, and the little advanced states of manufactures. The progressive settlement of the former, while it promises ample retribution, in the generation of future resources, diminishes or obstructs, in the mean time, the *active* wealth of the country. It not only draws off a part of the circulating money, and places it in a more passive state, but it diverts, into its own channels, a portion of that species of labor and industry which would otherwise be employed in furnishing materials for foreign trade, and which, by contributing to a favorable balance, would assist the introduction of specie. In the early periods of new settlements, the settlers not

[1] *Legislative and Documentary History of the Bank of the United States, etc.* (Washington, 1832), 23–5, 28–9.

only furnish no surplus for exportation, but they consume a part of that which is produced by the labor of others. The same thing is a cause that manufactures do not advance, or advance slowly. And, notwithstanding some hypotheses to the contrary, there are many things to induce a suspicion, that the precious metals will not abound in any country which has not mines, or variety of manufactures. They have been sometimes acquired by the sword; but the modern system of war has expelled this resource, and it is one upon which it is to be hoped the United States will never be inclined to rely.

The appearances alluded to are, greater prevalency of direct barter in the more interior districts of the country which, however, has been for some time past gradually lessening, and greater difficulty, generally, in the advantageous alienation of improved real estate, which, also, has of late diminished, but is still seriously felt in different parts of the Union. The difficulty of getting money, which has been a general complaint, is not added to the number, because it is the complaint of all times, and one in which imagination must ever have too great scope to permit an appeal to it.

If the supposition of such a deficiency be in any degree founded, and some aid to circulation be desirable, it remains to inquire what ought to be the nature of that aid.

The emitting of paper money by the authority of Government is wisely prohibited to the individual States by the national constitution, and the spirit of that prohibition ought not to be disregarded by the Government of the United States. Though paper emissions, under a general authority, might have some advantages not applicable, and be free from some disadvantages which are applicable to the like emissions by the States, separately, yet they are of a nature so liable to abuse — and, it may even be affirmed, so certain of being abused — that the wisdom of the Government will be shown, in never trusting itself with the use of so seducing and dangerous an expedient. In times of tranquillity, it might have no ill consequence; it might even perhaps be managed in a way to be productive of good; but, in great and trying emergencies, there is almost a moral certainty of its becoming mischievous. The stamping of paper is an operation so much easier than the laying of taxes, that a government in the practice of paper emissions, would rarely fail, in any such emergency, to indulge itself too far in the employment of that resource, to avoid as much as possible one less auspicious to present popularity. If it should not even be carried so far as to be rendered an absolute bubble, it would at least be likely to be extended to a degree which would occa-

sion an inflated and artificial state of things, incompatible with the regular and prosperous course of the political economy.

Among other material differences between a paper currency, issued by the mere authority of government, and one issued by a bank, payable in coin, is this: that, in the first case, there is no standard to which an appeal can be made, as to the quantity which will only satisfy, or which will surcharge the circulation; in the last, that standard results from the demand. If more should be issued than is necessary, it will return upon the bank. Its emissions, as elsewhere intimated, must always be in a compound ratio to the fund and the demand; whence it is evident, that there is a limitation in the nature of the thing; while the discretion of the government is the only measure of the extent of the emissions, by its own authority.

This consideration further illustrates the danger of emissions of that sort, and the preference which is due to bank paper.

The payment of the interest of the public debt, at thirteen different places, is a weighty reason, peculiar to our immediate situation, for desiring a bank circulation. Without a paper in general currency, equivalent to gold and silver, a considerable proportion of the specie of the country must always be suspended from circulation, and left to accumulate, preparatory to each day of payment; and as often as one approaches, there must in several cases be an actual transportation of the metals, at both expense and risk, from their natural and proper reservoirs, to distant places. This necessity will be felt very injuriously to the trade of some of the States; and will embarrass, not a little, the operations of the treasury in those States. It will also obstruct those negotiations, between different parts of the Union, by the instrumentality of treasury bills, which have already afforded valuable accommodations to trade in general.

Assuming it, then, as a consequence, from what has been said, that a national bank is a desirable institution, two inquiries emerge: Is there no such institution, already in being, which has a claim to that character, and which supersedes the propriety or necessity of another? If there be none, what are the principles upon which one ought to be established?

There are at present three banks in the United States: that of North America, established in the city of Philadelphia; that of New York, established in the city of New York; that of Massachusetts, established in the town of Boston. Of these three, the first is the only one which has at any time had a direct relation to the Government of the United States.

The Bank of North America originated in a resolution of Congress of the 26th of May, 1781, founded upon a proposition of the Superintendent of Finance, which was afterwards carried into execution by an ordinance of the 31st of December following, entitled "An ordinance to incorporate the subscribers to the Bank of North America."

The aid afforded to the United States by this institution, during the remaining period of the war, was of essential consequence; and its conduct towards them since the peace, has not weakened its title to their patronage and favor. So far, its pretensions to the character in question are respectable; but there are circumstances which militate against them, and considerations which indicate the propriety of an establishment on different principles.

The directors of this bank, on behalf of their constituents, have since *accepted* and *acted* under a new charter from the State of Pennsylvania, materially variant from their original one, and which so narrows the foundation of the institution, as to render it an incompetent basis for the extensive purposes of a national bank. . . .

The order of the subject leads next to an inquiry into the principles upon which the national bank ought to be organized.

The situation of the United States naturally inspires a wish that the form of the institution could admit of a plurality of branches. But various considerations discourage from pursuing this idea. The complexity of such a plan would be apt to inspire doubts, which might deter from adventuring in it. And the practicability of a safe and orderly administration, though not to be abandoned as desperate, cannot be made so manifest in perspective, as to promise the removal of those doubts, or to justify the Government in adopting the idea as an original experiment. The most that would seem advisable, on this point, is to insert a provision which may lead to it hereafter, if experience shall more clearly demonstrate its utility, and satisfy those who may have the direction, that it may be adopted with safety. It is certain that it would have some advantages, both peculiar and important. Besides more general accommodation, it would lessen the danger of a run upon the bank.

The argument against it is, that each branch must be under a distinct, though subordinate direction, to which a considerable latitude of discretion must of necessity be entrusted. And as the property of the whole institution would be liable for the engagements of each part, that and its credit would be at stake, upon the prudence of the directors of every part. The mismanagement of either branch might hazard serious disorder in the whole.

Another wish, dictated by the particular situation of the country is, that the bank could be so constituted as to be made an immediate instrument of loans to the proprietors of land; but this wish also yields to the difficulty of accomplishing it. Land is alone an unfit fund for a bank circulation. If the notes issued upon it were not to be payable in coin, on demand, or at a short date, this would amount to nothing more than a repetition of the paper emissions, which are now exploded by the general voice. If the notes are to be payable in coin, the land must first be converted into it by sale, or mortgage. The difficulty of effecting the latter, is the very thing which begets the desire of finding another resource, and the former would not be practicable on a sudden emergency, but with sacrifices which would make the cure worse than the disease. Neither is the idea of constituting the fund partly of coin and partly of land, free from impediments. These two species of property do not, for the most part, unite in the same hands. Will the moneyed man consent to enter into a partnership with the landholder, by which the *latter* will share in the profits *which will be* made *by the money of the former?* The money, it is evident, will be the agent or efficient cause of the profits — the land can only be regarded as an additional security. It is not difficult to forsee that an union, on such terms, will not be readily formed. If the landholders are to procure the money by sale or mortgage of a part of their lands, this they can as well do when the stock consists wholly of money, as if it were to be compounded of money and land.

To procure for the landholders the assistance of loans, is the great desideratum. Supposing other difficulties surmounted, and a fund created, composed partly of coin and partly of land, yet the benefit contemplated could only then be obtained, by the bank's advancing them its notes for the whole, or part, of the value of the lands they had subscribed to the stock. If this advance was small, the relief aimed at would not be given; if it was large, the quantity of notes issued would be a cause of *distrust;* and, if received at all, they would be likely to return speedily upon the bank for payment; which, after exhausting its coin, might be under a necessity of turning its lands into money, at any price that could be obtained for them, to the irreparable prejudice of the proprietors.

B. *Public and Private Finances after the Dissolution of the Bank, 1812–1815* [1]

In 1811 President Madison vetoed a bill to recharter the First United States Bank. Consequently the bank was forced to wind up its affairs; and in its place many state banks sprang up. During the war that followed, practically all these banks found it impossible to redeem their notes, which formed the larger part of the circulating medium. These notes depreciated in value, and many of them became entirely worthless. The government was hard pressed for funds and used the banks as best it could to finance the war. The situation has been well described as follows:

The deficiency in the amount of bank capital and bank accommodations, apprehended from the winding up of the National Bank, was more than supplied by the new state banks which sprung up in consequence of its destruction. In three years, 1810, 1811, 1812, *forty-one* new state banks were chartered, with an aggregate capital of some *thirty-six* millions; so that about the commencement of the war with Great Britain, the total number of banks in the United States was upwards of *one hundred and twenty*, and the aggregate bank capital, a part of which, however, was only nominal, about *seventy-six* millions.

The government, out of tenderness for the people, or a tender regard for their own popularity, perhaps a mixture of both, had resolved to carry on the war without the imposition of taxes. They relied upon loans. But the loan-market of Europe was shut against them; and at home a large proportion of the monied men were opposed to the war, and not well inclined to furnish the means for carrying it on. The government were obliged to tempt borrowers by the offer of very advantageous terms; and as the war went on, and their necessities increased, the terms they offered became still more favorable. Even the most tempting offers proved no match for the political prejudices of Eastern capitalists,— a most striking proof that avarice is a passion less strong than hate. But in the Middle and Southern States, where the war was popular, those who had money or could command it, were pushed by the double impulse of patriotism and interest to subscribe to the government loans. In some cases, the banks themselves became the lenders; in most others, they lent to the individuals, who lent to the government. Things went on in this way till after the middle of the year 1814. The government was then in the greatest distress for money, and more clamorous than

[1] *Banks, Banking, and Paper Currencies.* By Richard Hildreth (Boston, 1840), 64–8.

ever for loans. But the banks had already gone to the utmost limit of their means; their capitals were all invested; they had put more notes into circulation than they could keep there; and provided they continued to redeem those notes, — that is, to pay their own debts, — it would be impossible for them to lend the government any more money, or to enable individuals to lend it; indeed a speedy contraction of existing loans was absolutely necessary.

Examples of successful fraud seldom lack imitators. In this exigency, the bank directors bethought themselves of what the Bank of England had done, and was still doing. They well knew how profitable a speculation the stoppage of specie payment had proved to that bank; — it was accordingly suggested among them, and the resolution was presently adopted, *to suspend specie payments*.

To carry this scheme into successful operation, it was necessary first to secure the tacit approbation of the government; for if the government would consent to go on receiving their notes in payment of all public dues, it would give them a credit, which would sustain their circulation. The government was at the mercy of the banks. Overwhelmed with financial distresses brought upon it by neglect to provide sufficient pecuniary means for carrying on the war, it had no power to refuse; for if the banks did not supply money, where was it to be had?

Accordingly the government gave a tacit consent to the new arrangement, and in the month of August, the Banks of Philadelphia, Baltimore, and New York, by a compact among their directors, suspended specie payments, simultaneously,— an example which, before the end of the year, was followed, with but one or two exceptions, by all the banks of the Middle, Southern, and Western States.

This suspension of specie payments did not extend to New England. The bank directors there did not choose to become parties to this scheme for enriching themselves, and assisting the government, at the expense of honesty and their creditors; nor would the people, a majority of whom were opposed to the war, ever have submitted to so outrageous an imposition. The Philadelphia banks were understood to have taken the lead in this business of the suspension, and in imitation of what had been done in London, when the Bank of England suspended payment, a public meeting of merchants was held to sanction the measure, and to sustain the credit of the banks. As the alleged motive of the suspension was so very patriotic, as the banks pledged themselves to resume upon the return of peace, and as the demand for provisions and manufactures, created by the war, gave

a great activity to business, the suspension was submitted to by the people without a murmur.

Owing to the extensive and very advantageous loans which the banks had made to the government, the business of banking had become very profitable, and the dividends were high. As always happens, there was a rush to participate in these high profits; and it thus came about, that just about the time of the suspension of specie payments, a great number of new banks came into existence, which thus commenced their operations, unrestrained by that necessary check of payment on demand, by which alone the issues of a bank can be safely regulated. It was about this time that the State of Pennsylvania had chartered thirty-seven new banks, by a single act, many of which took advantage of the suspension of specie payments to go into operation without any solid capital whatever. The same causes gave rise to the establishment of new banks in other states. Almost all these institutions, put into operation during the suspension of specie payments, were mere speculative concerns, not possessed of any substantial means whatever.

The suspension, it was said, was to continue only during the war. Peace came in five months; but the banks gave not the slightest indication of any desire to return to honest courses. The people, not well acquainted with the subject, purposely puzzled and misled by the specious arguments of the bank directors, and those who were interested, or who supposed themselves interested, in the continuance of the suspension, and deceived by the apparent prosperity of business, under this new system of banking, did not move in the matter. As to the government, it was still involved in the deepest financial embarrassment. The treasury overflowed with "unconvertible" bank paper; but the greatest difficulty was experienced in meeting the heavy demands which fell due in the Eastern States, where nothing would be accepted in payment except specie or notes equivalent to specie.

The banks therefore went on to suit themselves; and the years 1815, 1816, may be well marked in the American calendar, as the jubilee of swindlers and the Saturnalia of non-specie-paying banks. Throughout the whole country, New England excepted, it required no capital to set up a bank. All that was wanted was a charter; and influential politicians easily obtained charters from the blind party confidence or interested votes of the state legislatures.

The banks, all through the country, immediately commenced lending their paper to all who could give any tolerable security.

This over issue of notes soon produced a depreciation. Depreciation produced a rise in prices; the apparent value of all kinds of property suddenly went up, and the people imagined they were never growing rich so fast. Business and all kinds of speculation were uncommonly brisk; the dividends made by the banks were enormous.

This description does not apply to New England. None of this artificial stimulus was felt there. In fact, that part of the country was subjected to a particular depression; for the foreign trade left Boston and the other New England ports, where the duties were demanded in specie or notes equivalent to specie, and concentrated at Philadelphia, Baltimore and other southern cities, where the currency in which duties were paid had depreciated twenty-five per cent and upwards. Thus, by one of the effects of this public fraud, the New Englanders were punished for being honest; and those places in which swindling was carried to the greatest extent, and the greatest depreciation in the currency produced, obtained, as the reward of their villainy, a monopoly of the foreign trade.

II. Second United States Bank

A. *Necessity of a United States Bank after the War of 1812*[1]

In 1816 Congress chartered the Second United States Bank for a period of twenty years. Fourteen years later a committee of the House of Representatives described the condition of the currency at the end of the War of 1812, and explained how the bank had assisted the government in restoring it to a sound basis. This committee reported in part:

The committee will now present a brief exposition of the state of currency at the close of the war; of the injury which resulted from it, as well to the Government as to the community; and their reasons for believing that it could not have been restored to a sound condition, and cannot now be preserved in that condition, without the agency of such an institution as the Bank of the United States.

The price current appended to this report will exhibit a scale of depreciation in the local currency, ranging, through various degrees, to twenty, and even to twenty-five per cent. Among the principal Eastern cities, Washington and Baltimore were the points at which the depreciation was greatest. The paper of the banks in these places was from twenty to twenty-two per cent. below par. At Philadelphia

[1] *Legislative and Documentary History of the Bank of the United States, etc.* (Washington, 1832), 742–3.

the depreciation was considerably less, though, even there, it was from seventeen to eighteen per cent. In New York and Charleston, it was from seven to ten per cent. But, in the interior of the country, where banks were established, the depreciation was even greater than at Washington and Baltimore. In the western part of Pennsylvania, and particularly at Pittsburg, it was twenty-five per cent. These statements, however, of the relative depreciation of bank paper at various places, as compared with specie, give a very inadequate idea of the enormous evil inflicted upon the community by the excessive issues of bank paper. No proposition is better established than that the value of money, whether it consists of specie or paper, is depreciated in exact proportion to the increase of its quantity, in any given state of the demand for it. If, for example, the banks, in 1816, doubled the quantity of the circulating medium by their excessive issues, they produced a general degradation of the entire mass of the currency, including gold and silver, proportioned to the redundancy of the issues, and wholly independent of the relative depreciation of bank paper at different places, as compared with specie. The nominal money price of every article was, of course, one hundred per cent. higher than it would have been, but for the duplication of the quantity of the circulating medium. Money is nothing more nor less than the measure by which the relative value of all articles of merchandise is ascertained. If, when the circulating medium is fifty millions, an article should cost one dollar, it would certainly cost two, if, without any increase of the uses of a circulating medium, its quantity should be increased to one hundred millions. This rise in the price of commodities, or depreciation in the value of money, as compared with them, would not be owing to the want of credit in the bank bills, of which the currency happened to be composed. It would exist, though these bills were of undoubted credit, and convertible into specie at the pleasure of the holder, and would result simply from the redundancy of their quantity. It is important to a just understanding of the subject, that the relative depreciation of bank paper at different places, as compared with specie, should not be confounded with this general depreciation of the entire mass of the circulating medium, including specie. Though closely allied, both in their causes and effects, they deserve to be separately considered.

The evils resulting from the relative depreciation of bank paper at different places, are more easily traced to their causes, more palpable in their nature, and, consequently, more generally understood by the community. Though much less ruinous than the evils re-

sulting from the general depreciation of the whole currency, they are yet of sufficient magnitude to demand a full exposition.

A very serious evil, already hinted at, which grew out of the relative depreciation of bank paper, at the different points of importation, was its inevitable tendency to draw all the importations of foreign merchandise to the cities where the depreciation was greatest, and divert them from those where the currency was comparatively sound. If the Bank of the United States had not been established, and the Government had been left without any alternative but to receive the depreciated local currency, it is difficult to imagine the extent to which the evasion of the revenue laws would have been carried. Every State would have had an interest to encourage the excessive issues of its banks, and increase the degradation of its currency, with a view to attract foreign commerce. Even in the condition which the currency had reached in 1816, Boston, and New York, and Charleston, would have found it advantageous to derive the supplies of foreign merchandise through Baltimore; and commerce would, undoubtedly, have taken that direction, had not the currency been corrected. To avoid this injurious diversion of foreign import, Massachusetts, and New York, and South Carolina, would have been driven, by all motives of self defence and self interest, to degrade their respective currencies at least to a par with the currency of Baltimore; and thus a rivalry in the career of depreciation would have sprung up, to which no limit can be assigned. As the tendency of this state of things would have been to cause the largest portion of the revenue to be collected at a few places, and in the most depreciated of the local currency, it would have followed that a very small part of that revenue would have been disbursed at the points where it was collected. The Government would, consequently, have been compelled to sustain a heavy loss upon the transfer of its funds to the points of expenditure. The annual loss which would have resulted from these causes alone, cannot be estimated at a less sum than two millions of dollars.

But the principal loss which resulted from the relative depreciations of bank paper at different places, and its want of general credit, was that sustained by the community in the great operations of commercial exchange. The extent of these operations annually, may be safely estimated at sixty millions of dollars. Upon this sum, the loss sustained by the merchants, and planters, and farmers, and manufacturers, was not probably less than an average of ten per cent., being the excess of the rate of exchange between its natural rate in a sound state of the currency, and beyond the rate to which it has

been actually reduced by the operations of the Bank of the United States. It will be thus perceived, that an annual tax of six millions of dollars was levied from the industrious and productive classes, by the large moneyed capitalists in our commercial cities, who were engaged in the business of brokerage. A variously depreciated currency, and a fluctuating state of the exchanges, open a wide and abundant harvest to the money brokers; and it is not, therefore, surprising, that they should be opposed to an institution, which, at the same time that it has relieved the community from the enormous tax just stated, has deprived them of the enormous profits which they derived from speculating in the business of exchange. In addition to the losses sustained by the community, in the great operations of exchange, extensive losses were suffered throughout the interior of the country in all the smaller operations of trade, as well as by the failure of the numerous paper banks, puffed into a factitious credit by fraudulent artifices, and having no substantial basis of capital to ensure the redemption of their bills.

B. *President Jackson's Veto of the Bank Bill in 1832* [1]

Despite the assistance the Second United States Bank had rendered in restoring the currency and in placing the banking of the country on a sound basis, there were those who believed that its existence was contrary to the Constitution and that it was a menace to the government. Notable among the public men who opposed the bank was President Jackson.

In 1829 he had expressed doubt as to the necessity or the desirability of the bank. Later, the bank was charged with meddling in politics. Friends of the bank succeeded in 1832 in having Congress pass a bill rechartering it for a term of twenty years. President Jackson vetoed the bill on several grounds, one of which was that the bank was a monopoly and hence inexpedient.

The bill "to modify and continue" the act entitled "An act to incorporate the subscribers to the Bank of the United States" was presented to me on the 4th July instant. Having considered it with that solemn regard to the principles of the Constitution which the day was calculated to inspire, and come to the conclusion that it ought not to become a law, I herewith return it to the Senate, in which it originated, with my objections.

A bank of the United States is in many respects convenient for the Government and useful to the people. Entertaining this opinion, and deeply impressed with the belief that some of the powers and privi-

[1] *Messages and Papers of the Presidents*. Edited by James D. Richardson ([Washington], 1895–1903), II, 576–8.

leges possessed by the existing bank are unauthorized by the Constitution, subversive of the rights of the States, and dangerous to the liberties of the people, I felt it my duty at an early period of my Administration to call the attention of Congress to the practicability of organizing an institution combining all its advantages and obviating these objections. I sincerely regret that in the act before me I can perceive none of those modifications of the bank charter which are necessary, in my opinion, to make it compatible with justice, with sound policy, or with the Constitution of our country.

The present corporate body, denominated the president, directors, and company of the Bank of the United States, will have existed at the time this act is intended to take effect twenty years. It enjoys an exclusive privilege of banking under the authority of the General Government, a monopoly of its favor and support, and, as a necessary consequence, almost a monopoly of the foreign and domestic exchange. The powers, privileges, and favors bestowed upon it in the original charter, by increasing the value of the stock far above its par value, operated as a gratuity of many millions to the stockholders.

An apology may be found for the failure to guard against this result in the consideration that the effect of the original act of incorporation could not be certainly foreseen at the time of its passage. The act before me proposes another gratuity to the holders of the same stock, and in many cases to the same men, of at least seven millions more. This donation finds no apology in any uncertainty as to the effect of the act. On all hands it is conceded that its passage will increase at least 20 or 30 per cent more the market price of the stock, subject to the payment of the annuity of $200,000 per year secured by the act, thus adding in a moment one-fourth to its par value. It is not our own citizens only who are to receive the bounty of our Government. More than eight millions of the stock of this bank are held by foreigners. By this act the American Republic proposes virtually to make them a present of some millions of dollars. For these gratuities to foreigners and to some of our own opulent citizens the act secures no equivalent whatever. They are the certain gains of the present stockholders under the operation of this act, after making full allowance for the payment of the bonus.

Every monopoly and all exclusive privileges are granted at the expense of the public, which ought to receive a fair equivalent. The many millions which this act proposes to bestow on the stockholders of the existing bank must come directly or indirectly out of the earnings of the American people. It is due to them, therefore, if their

Government sell monopolies and exclusive privileges, that they should at least exact for them as much as they are worth in open market. The value of the monopoly in this case may be correctly ascertained. The twenty-eight millions of stock would probably be at an advance of 50 per cent, and command in market at least $42,000,000, subject to the payment of the present bonus. The present value of the monopoly, therefore, is $17,000,000, and this the act proposes to sell for three millions, payable in fifteen annual installments of $200,000 each.

It is not conceivable how the present stockholders can have any claim to the special favor of the Government. The present corporation has enjoyed its monopoly during the period stipulated in the original contract. If we must have such a corporation, why should not the Government sell out the whole stock and thus secure to the people the full market value of the privileges granted? Why should not Congress create and sell twenty-eight millions of stock, incorporating the purchasers with all the powers and privileges secured in this act and putting the premium upon the sales into the Treasury?

But this act does not permit competition in the purchase of this monopoly. It seems to be predicated on the erroneous idea that the present stockholders have a prescriptive right not only to the favor but to the bounty of Government. It appears that more than a fourth part of the stock is held by foreigners and the residue is held by a few hundred of our own citizens, chiefly of the richest class. For their benefit does this act exclude the whole American people from competition in the purchase of this monopoly and dispose of it for many millions less than it is worth. This seems the less excusable because some of our citizens not now stockholders petitioned that the door of competition might be opened, and offered to take a charter on terms much more favorable to the Government and country.

But this proposition, although made by men whose aggregate wealth is believed to be equal to all the private stock in the existing bank, has been set aside, and the bounty of our Government is proposed to be again bestowed on the few who have been fortunate enough to secure the stock and at this moment wield the power of the existing institution. I can not perceive the justice or policy of this course. If our Government must sell monopolies, it would seem to be its duty to take nothing less than their full value, and if gratuities must be made once in fifteen or twenty years let them not be bestowed on the subjects of a foreign government nor upon a designated and favored class of men in our own country. It is but justice and good policy, as far as the nature of the case will admit, to confine our favors to our

own fellow citizens, and let each in his turn enjoy an opportunity to profit by our bounty. In the bearings of the act before me upon these points I find ample reasons why it should not become a law.

III. The Panic of 1837 and its Effects

A. *President Van Buren on the Panic of 1837* [1]

Following his veto of the Bank Bill, President Jackson had the government deposits withdrawn from the United States Bank, and placed in certain selected state banks, often referred to as "pet banks." These banks naturally inflated their note issues and put out more currency than the country really needed. In 1836 the President ordered the receivers of public monies to receive no more notes of the banks, except in a few unimportant instances, in payment for public lands. The result was a run on the banks by note holders. Many of the banks were not able to redeem their notes and consequently they suspended specie payments. The panic of 1837 followed, and President Van Buren discussed it as follows:

During the earlier stages of the revulsion [the panic of 1837] through which we have just passed much acrimonious discussion arose and great diversity of opinion existed as to its real causes. This was not surprising. The operations of credit are so diversified and the influences which affect them so numerous, and often so subtle, that even impartial and well-informed persons are seldom found to agree in respect to them. To inherent difficulties were also added other tendencies which were by no means favorable to the discovery of truth. It was hardly to be expected that those who disapproved the policy of the Government in relation to the currency would, in the excited state of public feeling produced by the occasion, fail to attribute to that policy any extensive embarrassment in the monetary affairs of the country. The matter thus became connected with the passions and conflicts of party; opinions were more or less affected by political considerations, and differences were prolonged which might otherwise have been determined by an appeal to facts, by the exercise of reason, or by mutual concession. It is, however, a cheering reflection that circumstances of this nature can not prevent a community so intelligent as ours from ultimately arriving at correct conclusions. Encouraged by the firm belief of this truth, I proceed to state my views, so far as may be necessary to a clear understanding of the remedies I feel it my duty to propose and of the reasons by which I have been led to recommend them.

The history of trade in the United States for the last three or

[1] *Messages and Papers of the Presidents.* Edited by James D. Richardson ([Washington], 1895–1903), III, 325–7.

four years affords the most convincing evidence that our present condition is chiefly to be attributed to overaction in all the departments of business — an overaction deriving, perhaps, its first impulses from antecedent causes, but stimulated to its destructive consequences by excessive issues of bank paper and by other facilities for the acquisition and enlargement of credit. At the commencement of the year 1834 the banking capital of the United States, including that of the national bank, then existing, amounted to about $200,000,000, the bank notes then in circulation to about ninety-five millions, and the loans and discounts of the banks to three hundred and twenty-four millions. Between that time and the 1st of January, 1836, being the latest period to which accurate accounts have been received, our banking capital was increased to more than two hundred and fifty-one millions, our paper circulation to more than one hundred and forty millions, and the loans and discounts to more than four hundred and fifty-seven millions. To this vast increase are to be added the many millions of credit acquired by means of foreign loans, contracted by the States and State institutions, and, above all, by the lavish accommodations extended by foreign dealers to our merchants. The consequences of this redundancy of credit and of the spirit of reckless speculation engendered by it were a foreign debt contracted by our citizens estimated in March last at more than $30,000,000; the extension to traders in the interior of our country of credits for supplies greatly beyond the wants of the people; the investment of $39,500,000 in unproductive public lands in the years 1835 and 1836, whilst in the preceding year the sales amounted to only four and a half millions; the creation of debts, to an almost countless amount, for real estate in existing or anticipated cities and villages, equally unproductive, and at prices now seen to have been greatly disproportionate to their real value; the expenditure of immense sums in improvements which in many cases have been found to be ruinously improvident; the diversion to other pursuits of much of the labor that should have been applied to agriculture, thereby contributing to the expenditure of large sums in the importation of grain from Europe — an expenditure which, amounting in 1834 to about $250,000, was in the first two quarters of the present year increased to more than $2,000,000; and finally, without enumerating other injurious results, the rapid growth among all classes, and especially in our great commercial towns, of luxurious habits founded too often on merely fancied wealth, and detrimental alike to the industry, the resources, and the morals of our people.

It was so impossible that such a state of things could long continue that the prospect of revulsion was present to the minds of considerate men before it actually came. None, however, had correctly anticipated its severity. A concurrence of circumstances inadequate of themselves to produce such widespread and calamitous embarrassments tended so greatly to aggravate them that they can not be overlooked in considering their history. Among these may be mentioned, as most prominent, the great loss of capital sustained by our commercial emporium in the fire of December, 1835 — a loss the effects of which were underrated at the time because postponed for a season by the great facilities of credit then existing; the disturbing effects in our commercial cities of the transfers of the public moneys required by the deposit law of June, 1836, and the measures adopted by the foreign creditors of our merchants to reduce their debts and to withdraw from the United States a large portion of our specie.

B. *Effects of the Panic on Banking, 1837–1839* [1]

The panic of 1837 not only caused the banks to suspend specie payment, but compelled many of them to close their doors. Two years later the panic recurred in a mild form and other banks were forced out of business. Mr. Hildreth, the historian, describes the situation as follows:

The New York banks having determined to continue to be banks, and not to convert themselves into mere machines for manufacturing paper money of no particular value, the banks of New England, of New Jersey, and of the whole North-west, have found themselves obliged, with more or less reluctance, and some of them after ineffectual attempts at suspension, to continue to be banks; while the banks of Pennsylvania, and of the South generally, have taken the other course, and, to borrow a phrase from Mr. Calhoun, have *unbanked* themselves. How long they will choose to continue in this anomalous condition it is not easy to say. Some of them will be apt to have great difficulty in getting out of it.

All the southern banks, unless perhaps we ought to except a few in New Orleans and some other of the large commercial towns, labor under one great difficulty for which it is not easy to find a remedy. They are managed mostly by planters, and they lend principally to planters, a class of men quite destitute of those ideas of mercantile punctuality essential to the safe conduct of a specie-paying bank.

[1] *Banks, Banking and Paper Currencies.* By Richard Hildreth (Boston, 1840), 106–8.

Moreover, the customers of these banks are much too fond of borrowing money, not merely in anticipation of the crop, but for permanent investment in agricultural operations,— loans which no bank can safely make.

Indeed several of these institutions bear altogether too close a resemblance to Mr. Law's famous land banks. The capital of several of them has been raised in Europe in this way. The subscribers to the stock, instead of paying in their subscriptions in cash, have given the bank a mortgage of land and slaves, appraised as of equivalent value. These mortgages the bank has assigned to the State, as security for the ultimate repayment of a state loan, which the State has been induced to contract abroad for the benefit of the stockholders in the bank, who have entered into a contract to keep down the interest of the loan, and for its ultimate repayment. In this way a cash banking capital has been obtained; but as the stockholders, in all these banks, have a right to a perpetual loan nearly to the amount of their stock, it is evident that the amount of capital left to be employed in the discount of mercantile papers must be very limited, and even this small amount is pretty certain to be engrossed by the discount of accommodation paper for the stockholders. The truth is, that banks are mercantile institutions, adapted to the wants and habits of a mercantile community, and little likely to be well managed, or to answer any good purpose, in communities destitute, to a great extent, of commercial spirit and feelings.

The number of banks in the United States at the close of the year 1839, including the non-specie-paying banks, exceeded *seven hundred* with a capital of upwards of *three hundred millions* of dollars, being double the number of banks, and double the amount of banking capital, which existed ten years before.

The principal occasion of this great increase of local banks was, the refusal to recharter the Bank of the United States. This was especially the case in the West and South, where the currency had been principally supplied and the banking business transacted by the branches of the National Bank. The closing of those branches gave a great impulse to the creation of new banks throughout all that portion of the country.

The total number of bank failures which occurred in the United States in the half century which elapsed from the period of the first institution of banks in the country, down to the beginning of the year 1837, the era of the second general suspension, was about *one hundred and seventy-five*,— about *one hundred and twelve* of which oc-

curred in the States south and west of Pennsylvania. By far the larger part of these failures happened to banks which had been put in operation during the suspension of specie payments from 1814 to 1818, and which were set up without any substantial capital.

The number of bank failures consequent upon the crisis of 1837 is not yet known. It amounts perhaps to *thirty*. The bank failures that will occur in consequence of the crisis of 1839, an appendix, as it were, to that of 1837, will be still more numerous.

All these failures have originated in one of the four following causes, which have produced all the bank failures that ever happened.

1st. An attempt to do banking business without a sufficient capital.

2d. Ignorance and incapacity on the part of the directors.

3d. Fraud on the part of the directors.

4th. A general depreciation of property, ruinous to the debtors of the banks, by which the bank capital has been swallowed up.

C. *Arguments for an Independent Treasury and "Hard Money," 1845* [1]

The disastrous financial experience of the government with the state banks during the panic of 1837 revived the idea of establishing an independent treasury which it was thought would be able to take the place of the banks in handling government funds. Accordingly, an independent treasury was established in 1840. The next year the Whigs, who had come into power with Harrison's election to the presidency, abolished it and attempted to re-establish a United States Bank. In the latter attempt, however, they were unsuccessful, because of President Tyler's opposition to it. When the Democrats came into power in 1845, they set about to re-enact the law of 1840, which they did in 1846. Secretary Walker's argument for an independent treasury was as follows:

The Secretary of the Treasury, on coming into office, found the revenues deposited with banks. The law establishing the Independent Treasury was repealed, and the secretary had no power to reëstablish that system. Congress had not only repealed that law, but, as a substitute, had adopted the present system of deposite banks, and prohibited changing any one of those for another bank, except for specified reasons. No alternative was left but to continue the existing system until Congress should think proper to change it. That change, it is hoped, will now be made by a return to the treasury of the Constitution. One of the great evils of banks is the constant expansion and contraction of the currency; and this evil is augmented by the deposites of the revenue with banks, whether State or national. The only proper course for the government is to keep its own money

[1] Treasury Report, 1845 (Washington, 1846), 16.

separate from all banks and bankers, in its own treasury— whether in the mint, branch mints, or other government agencies— and to use only gold and silver coin in all receipts and disbursements. The business of the country will be more safe when an adequate supply of specie is kept within our limits, and its circulation encouraged by all the means within the power of the government. If this government, and the States, and the people unite in suppressing the use of specie, an adequate supply, for want of a demand, cannot be kept within our limits, and the condition of the business and currency of the country will be perilous and uncertain. It will be completely within the power of the banks, whose paper will constitute the exclusive circulation of the whole community. Nor will it be useful to establish a constitutional treasury, if it is to receive or disburse the paper of banks. Separation from banks in that case would only be nominal, and no addition would be made to the circulation of gold and silver.

Various forms of paper credit have been suggested, as connected with the operations of the constitutional treasury; but they are all considered as impairing one of the great objects of such a treasury — namely, an augmented circulation of specie. If paper, in whatever form, or from whatever source it may issue, should be introduced as a circulation by the constitutional treasury, it would, precisely to that extent, diminish its use as a means of circulating gold and silver.

The constitutional treasury could be rendered a most powerful auxiliary of the mint in augmenting the specie circulation. The amount of public money which can be placed in the mint is now limited by law to one million of dollars; and to that extent it is now used as a depository, and as a means of increasing our coinage. It is suggested that this limitation may be so modified as to permit the use of our mint and branch mints for a much larger sum, in connection with the constitutional treasury. The amount of public money received at New York greatly exceeds that collected at all other points, and would of itself seem to call for a place of public deposite there; in view of which, the location of a branch of the mint of the United States at that city would be most convenient and useful. The argument used against a constitutional treasury, of the alleged insecurity of the public funds in the hands of individuals, and especially the vast amount collected at New York, will be entirely obviated by such an establishment. The mint of the United States has now been in existence 52 years. It has had the custody of upwards of 114,000,000

dollars, and during this long period of time there never has been a loss of any of its specie in the mint by the government. The mint at Philadelphia is now conducted with great efficiency, by the able and faithful officer at the head of that establishment, whose general supervisory authority, without leaving the parent mint, might still be wisely extended to the branch at New York. Besides the utility of such a branch as a place for keeping safely and disbursing the public money, it is believed that the coinage might be greatly augmented by the existence of a branch of the mint at that great city. It is there that two thirds of the revenue is annually collected— the whole of which, under the operation of the constitutional treasury, would be received in specie. Of that amount, a very large sum would be received in coin of other countries, and especially in foreign gold coins— all which could be speedily converted, upon the spot, into our own coins of gold and silver. The amount also of such foreign coin brought by emigrants to the city of New York is very considerable; a large portion of which would find its way to the branch of the mint for re-coinage. The foreign gold coins do not, and it is feared will not, circulate generally as a currency, notwithstanding they are made a tender by law. The rate at which these coins are fixed by law is not familiar to the people; the denomination of such coin is inconvenient; the parts into which it is divided are not decimal; the rates at which it is taken vary in different parts of the Union. It is inconvenient in the way of ready transfer in counting; it is more difficult, in common use, to distinguish the genuine from the counterfeit foreign coin; and the stamp upon it is not familiar to the people— from all which causes, a foreign gold coin does not, and will not, circulate generally as a currency among the people. In many of the banks, nearly the whole of their specie is kept in every variety of foreign gold coin; and when it is tendered by them in payment of their notes, the great body of the people, not being familiar with these coins, do not receive them; and thus the circulation of a gold currency is, to a great extent, defeated. If these coins were converted at our mint, or branch mints, into the eagle, the half-eagle, the quarter-eagle, we should speedily have a large supply of American gold coin, and it would very soon be brought into common use as a currency, and thus give to it greater stability, and greater security to all the business of the country. A considerable amount of foreign gold coin has, during the present year, under the directions of this department, been converted into American gold coin; but the process would be much more rapid if aided by the organization of the constitutional

treasury, and the establishment of a branch of the mint at the great commercial emporium of the Union. With the mint and branch mints as depositories, the sum remaining in the hands of other receivers of public money, whether of lands or customs, would be inconsiderable, and the government could be readily protected from all losses of such sums by adequate bonds, and the power by law to convict and punish as criminals all who embezzle the public moneys.

It is believed, under such a system, that no defaults would take place, and that the public moneys would be safely kept and disbursed in gold and silver. This government is made, by the constitution, the guardian of a specie currency. That currency can only be coined, and its value regulated, by this government. It is one of its first duties to supply such a currency, by an efficient mint, and by general regulations of the coinage; but in vain will it attempt to perform that duty, if, when coin is made or regulated in value, this government dispenses with its use, and expels it from circulation, or drives it out of the country, by substituting the paper of banks in all the transactions of the government.

There is nothing which will advance so surely the prosperity of the country as an adequate supply of specie, diffused throughout every portion of the Union, and constituting, to a great extent, the ordinary circulation everywhere among the people. It is a currency that will never break nor fail; it will neither expand nor contract beyond the legitimate business of the country; it will lead to no extravagant speculations at one time, to be followed by certain depression at another; nor will labor ever be robbed of its reward by the depreciation of such currency. There is no danger that we shall have too much gold and silver in actual circulation, or too small an amount of bank paper, or that any injury ever will be inflicted upon the business of the country, by a diminution of the circulation of the paper of banks, and the substitution in its place, to that extent, of gold and silver. Even their most ardent advocates must admit that banks are subject to periodical expansions and contractions, and that this evil would be increased by giving them the funds of the government to loan, and by receiving and disbursing nothing but their paper.

It is believed that the permanent interest of every class of the people will be advanced by the establishment of the constitutional treasury, and that the manufacturers especially will derive great benefit from its adoption. It will give stability to all their operations, and insure them, to a great extent, against those fluctuations, expansions, and contractions of the currency so prejudicial to their interests.

By guarding against inflations of the currency, it will have a tendency to check periodical excesses of foreign importations purchased in fact upon credit; while loans from banks, or dangerous enlargements of their business, and excessive issues of their paper, will be greatly diminished. . . .

IV. Systems of Banking in the United States before 1860

A. *Early State Banking in the West, 1821–1831* [1]

In some of the states, particularly in the west, banking was a state monopoly. Many of these enterprises failed, and the one projected by Illinois is typical of its class.

To remedy these evils [lack of money] the legislature of 1821 created a State Bank. It was founded without money, and wholly on the credit of the State. It was authorized to issue one, two, three, five, ten, and twenty dollar notes, in the likeness of bank bills, bearing two per cent. annual interest, and payable by the State in ten years. A principal bank was established at Vandalia, and four or five branches in other places; the legislature elected all the directors and officers; a large number of whom were members of the legislature, and all of them professional politicians. The bank was directed by law to lend its bills to the people, to the amount of one hundred dollars, on personal security; and upon the security of mortgages upon land for a greater sum. These bills were to be receivable in payment of all State and county taxes, and for all costs and fees, and salaries of public officers; and if a creditor refused to endorse on his execution his willingness to receive them in payment of debt, the debtor could replevy or stay its collection for three years, by giving personal security. So infatuated were this legislature with this absurd bank project, that the members firmly believed that the notes of this bank would remain at par with gold and silver; and they could readily prove their belief to be well-founded; for the most difficult argument to answer is one founded partly upon fact, but mostly upon guess work and conjecture. . . .

In the summer of 1821, the new bank went into operation. Every man who could get an endorser borrowed his hundred dollars. The directors, it is believed, were all politicians; and either were then, or expected to be, candidates for office. Lending to everybody, and refusing none, was the surest road to popularity. Accordingly, three

[1] *History of Illinois.* By Thomas Ford (Chicago, 1854), 45–7.

hundred thousand dollars of the new money was soon lent without much attention to security or care for eventual payment. It first fell twenty-five cents, then fifty, and then seventy cents below par. And as the bills of the Ohio and Kentucky banks had driven all other money out of the State, so this new issue effectually kept it out. Such a total absence was there of the silver coins, that it became utterly impossible, in the course of trade, to make small change. The people, from necessity, were compelled to cut the new bills into two pieces, so as to make two halves of a dollar. This again further aided to keep out even the smallest silver coins, for the people must know that good money is a very proud thing, and will not circulate, stay, or go where bad money is treated with as much respect as the good. For about four years there was no other kind of money but this uncurrent State bank paper. In the meantime, very few persons pretended to pay their debts to the bank. More than half of those who had borrowed, considered what they had gotten from it as so much clear gain, and never intended to pay it from the first.

B. *Banking in New York and Massachusetts, 1813–1860* [1]

During the period before the Civil War several systems of banking developed in the United States. Three of these systems deserve notice. They are as follows:

[The Suffolk Bank System]

Two measures combined to raise the value of bank-notes: one was forcing the banks to redeem on presentation at their own counter, and the other was the initiation of a system by which other banks co-operated to secure such redemption. In the present day, when government-notes and national-bank notes are current everywhere at par, it is hard to realize how quickly a note depreciated at any distance from the bank which issued it. This was especially the case with notes from the banks of other States. There were no facilities for the holder visiting the bank to demand payment, and there was a doubt whether he would get the money if he did so visit it. In 1813 a movement toward a reform in the bank-currency began. Bills of banks in other States were then at a discount in Boston from three to five per cent, and the notes of Boston banks had nearly disappeared. The New-England Bank, organized in that year with a capital of $1,000,000, instituted the system of sending foreign bills for redemp-

[1] *Industrial History of the United States.* By Albert S. Bolles (Norwich, Conn., 1879), 797–8, 802.

tion to the banks which issued them, and charging the bill-holders only the actual expense of transmitting the notes and returning the proceeds. This was the beginning of the system of redemption afterward known as the Suffolk-Bank system. This system was more fully developed at a later period (1825), when five of the Boston banks — the Suffolk, Eagle, Manufacturers' and Mechanics' (now the Tremont), the Globe, and State — undertook its management. For a long time the system was bitterly opposed by those banks interested in preventing a return of their circulation; but it was eventually successful. Its exclusive management was finally assumed by the Suffolk Bank; which bank compelled the redemption at par in Boston of the notes of the New-England banks by a system of assorting and returning the notes to the place of issue, and its operations were continued down to the establishment of the national-bank system. The amount of New-England bank-notes redeemed at the Suffolk Bank from 1841 to 1857 was as follows, in millions of dollars:—

Date.	Millions.
1841	109
1842	105
1844	126
1845	137
1846	141
1847	165
1848	178
1849	199
1850	220
1851	243
1852	245
1853	288
1854	231
1855	341
1856	397
1857	376

[Safety-fund System]

From 1791, when the Bank of New York was incorporated, until the declaration of war with Great Britain in 1812, nineteen banks were chartered, with an aggregate capital of $18,215,000. Ten of them still exist, and are institutions of high rank. Between 1812 and 1829 twenty-four more were chartered, with a capital of $25,105,000, of which $13,770,000 was for banks in New-York City.

As yet there has been no legislation looking to the security of bank circulation, so little had the science of banking developed. But in

1829, when the charters of some forty banks were about to expire, Gov. Van Buren recommended the passage of a law, which was enacted in April of that year, providing a system of insurance of bank-notes based upon a custom prevalent among Chinese merchants. The law provided that all new or rechartered banks should pay an annual tax of one-half of one per cent on their capital stock until three per cent had been paid in, and the fund should be used by the State treasurer to redeem the notes and pay the debts of insolvent banks. If the fund became impaired at any time, new contributions were to be made to bring it up to a normal size. The law allowed the issue of notes to twice the amount of the capital, and loans to two and a half times the amount of capital. This safety-fund law did not accomplish its purpose. In 1841–42 eleven banks failed, whose capital was $3,150,000: their liabilities, which the State had to meet, amounted to $2,558,933. These eleven banks had contributed but $86,274 to the safety fund; and even down to Sept. 30, 1848, all of the safety-fund banks had contributed but $1,876,063. The State issued six-per-cent stock to make up the deficiency, and was partly reimbursed by new contributions from the banks. The law was amended, however, in 1842, so that the safety-fund became a security for circulating-notes only, and no other debts.

The law of 1829 also provided that there should be three commissioners to examine the banks, and report annually to the legislature on the condition of those institutions. The law provided that one commissioner should be appointed by the Governor and Senate, one by the banks of the southern part of the State, and one by the remaining banks. But in 1837 the Governor and Senate were authorized to select them all; and, this power being abused for political ends, the work of examination was in 1843 taken from the commissioners, whose office was abolished, and given to the comptroller. In 1851 the present office of bank superintendent was created instead. . . .

[Free Banking System]

The free banking system of New York was authorized in 1838. Its two great features were, that it opened the privileges of banking, on certain conditions, to all persons alike; and it provided much better security for the redemption of notes than had yet been provided. The system of deposits with the comptroller for security was the one on which the national banks of a later date were based. It was originally that all banking associations, on depositing stock of the

State of New York or of the United States, or any State stock which should be, or be made, equal to a five-per-cent stock, or bonds and mortgages on improved and productive real estate, worth, exclusive of the buildings thereon, double the amount secured by the mortgage, and bearing interest at not less than six per cent per annum, should receive from the comptroller of the State an equal amount of circulating-notes. Previous to the year 1843 twenty-nine of these banks, with an aggregate circulation of $1,233,374, had failed; and their securities, consisting of stocks and bonds and mortgages amounting to $1,555,338, were sold for $953,371, entailing a loss of $601,966. The avails of the securities were sufficient to pay but seventy-four per cent of the circulation alone. The losses to the bill-holders occurred only in the case of those banks which had deposited State stocks other than those of New York. The law was thereupon so amended as to exclude all stocks, except those issued by the State of New York, and to require those to be made equal to a five-per-cent stock. An amendment in 1848 required that the stocks deposited should bear six per cent interest instead of five; and that the bonds and mortgages should bear interest at seven per cent, and should be on productive property, and for an amount not exceeding two-fifths of the value of the land covered by them. Subsequently, on April 10, 1849, the law was again so amended as to require that at least one-half of the securities so deposited should consist of New-York-State stocks, and that not more than one-half should be in the stocks of the United States; the securities in all cases to be, or to be made, equal to a stock producing an interest of six per cent per annum, and to be taken at a rate not above their par value, and at not more than their market-value.

Two other interesting features of the later State-bank legislation in New York were the requirement that the banks redeem their notes at some agency in New York, Albany, or Troy, and that stockholders should be individually liable for the obligations of the bank to the extent of their shares. The latter provision was incorporated into the Constitution of 1846. The former was a law of 1840, which allowed a discount of one-half of one per cent on redemption: in 1851 the discount was reduced to one-fourth of one per cent. The New-York-City banks, however, soon inaugurated the Suffolk-Bank system already described, and divided the discount between themselves and the redemption agency. Such banks as did not provide for redemption were forced to close up.

C. *Conditions of Banking in 1860* [1]

During the decade 1850–1860 the banks of the country multiplied in number and enjoyed increased prosperity. Trade and commerce, both domestic and foreign, flourished, and the general prosperity of the time was reflected by the sound condition of banking. A partial report of conditions in 1860 is as follows:

Among the evidences of prosperity and general accumulation of wealth in the United States, the multiplication of banks with increased aggregate capital is one of the most significant. When, as in this country has been generally the case, individual promises representing produce and merchandize, and made available through the instrumentality of banks, are almost the sole means by which commodities pass from the producers to the consumers, the increased action of the banks becomes the index of larger production and more active trade. Where crops and the products of manufacturing industry are more abundant, the aggregate amount of paper created by their interchange is larger, and the negotiations of this paper require greater banking facilities. This want usually manifests itself in a more lucrative banking business, which draws more capital into that employment. Such a state of affairs presented itself during the decade which closed with 1860. The bank movement in the United States during that period underwent great expansion without becoming less sound. In that respect it presented a strong contrast to the expansion that occurred in the decade which ended with 1840. In that period a season of speculation in bank stocks and wild lands manifested itself, and the paper created for bank negotiation represented imaginary or speculative values rather than commodities produced. Those values were never realized, and the whole paper system based on them collapsed. If we compare the aggregate features of the banks at each decade with . . . the sum of the imports and exports for corresponding dates, the results are as follows:

Years	No. of banks	Capital	Loans	Specie	Circulation	Imports and exports
1830	330	$145,192,268	$200,451,214	$22,114,917	$ 61,323,898	$144,726,428
1840	901	358,442,692	462,896,523	33,105,155	106,968,572	239,227,465
1843	691	228,861,948	254,544,937	33,505,806	58,563,608	149,09c,279
1850	872	227,469,074	412,607,653	48,677,138	155,012,911	330,037,038
1860	1,562	421,880,095	691,945,580	83,594,537	207,102,477	762,288,550

[1] *Preliminary Report on the Eighth Census, 1860* (Washington, 1862), 75–8.

The year 1843 was that of the lowest depression after the extensive liquidation that following the expansions of 1837–'39. In that year the bank credits were, however, large, as measured by the foreign trade or the sum of the imports and exports, but an internal trade had been developed through the settlements of the western country which required more credits. The operation of the general bankrupt law aided in clearing away the wreck of over two hundred banks that had failed, and which failures involved that of several sovereign States that had loaned their credits for bank capital.

The elements of prosperity were now again active, and banking facilities were required to a greater extent. The severe losses the public had suffered made some more comprehensive guarantee necessary to a full restoration of confidence in bank paper. In New York, in 1838, a new principle had been adopted — that of requiring the banks to deposit security for their circulating notes and holding stockholders liable to an amount equal to the value of their shares. On this basis the banking of New York was thenceforth to operate; and the principle, as its value became recognized, was gradually adopted in other States.

The failure of the Irish harvests of 1846–'47, followed by those of England in 1848–'49 by creating a great demand for American breadstuffs, stimulated business and gave a new impulse to banking. The year 1850 showed an amount of foreign trade more than double that of 1843. With the increase of business the banks were very prosperous, as is manifest in the fact, that although the capital of the banks was no more in that year than in 1843, their discounts were one hundred and fifty millions, or 60 per cent. greater. Thus the decade opened with a very lucrative banking business, and amid the greatest excitement in relation to the gold discoveries of California. The spirit of enterprise abroad was very strong, and the impression that prices were to rise by reason of the depreciation of gold was prevalent; hence the general desire to operate, in order to avail of the anticipated profits. Industry of all descriptions was very active and productive, and there never was a period when the national capital accumulated so fast, a remarkable evidence of which was afforded in the vast amount expended in the construction of railroads; while, of the large capital accumulated, a considerable portion was employed in banking. The incorporated bank capital increased nearly two hundred millions, and the private bank capital half as much. The report of the Treasury Department gave the latter amount at $118,036,080. . . .

The increase of bank capital was large in the Atlantic cities, particularly in Boston and New York, of which the number and capital were respectively as follows:

	1850		1860		Increase	
	No.	Capital	No.	Capital	No.	Capital
Boston	30	$21,760,000	42	$36,581,700	12	$14,821,700
New York	31	33,600,602	55	69,758,777	24	36,158,175
Total of two cities	61	55,360,602	97	106,340,477	36	50,979,875

This increase of banks, following the general expansion of business, brought with it the necessity of some improved means of adjusting the daily mutual balances. The fifty-five banks in New York city, for example, were each compelled to settle as many accounts daily. To obviate that great labor the clearing system was devised. Each bank sends every morning to the clearing-house all the checks and demands it may have received the day previous, in the course of business, upon all others. These in a short time are interchanged, and a balance struck and paid. This system was established in 1853, and the amount of the exchanges and balances annually were as follows:

Year	Amount exchanged	Balances
1854	$5,750,455,987.06	$297,411,493
1855	5,362,912,098.33	289,694,137
1856	6,906,213,328.47	334,714,489
1857	8,333,226,718.06	365,313,901
1858	4,756,664,386.09	314,238,910
1859	6,448,005,956.01	363,984,682
1860	7,231,143,056.69	308,693,438
1861	5,915,742,758.05	353,383,944
Total for eight years	50,704,364,288.76	2,627,434,997

With the development of business the transactions grew immensely up to 1858, when they fell off nearly one-half under the panic of that year. They recovered gradually up to the breaking out of the rebellion. The banks of Boston and Philadelphia adopted the same sys-

tem with similar results. The figures indicate to what an extent the credits of individuals, created in the operations of business, are cancelled through the intervention of the banks of the cities where the commerce of the whole country centralizes.

In the States of Illinois, Mississippi, Arkansas and Florida, after the collapse of 1837, no banks were again created up to 1850, and the three last named are still without them, with the exception of two small ones in Florida. Texas has a small bank at Galveston, and Utah, Oregon, and New Mexico have none. In the District of Columbia four old banks expired by limitation of charter in the hands of trustees, and Congress refused to recharter them; but they continue to transact business.

It is probable that a large portion of the increase in banking, particularly at the west, has been due to the introduction of the security system of New York, the idea of which seemed to popularize that which had previously been in bad odor. The following table shows the States which have adopted the free banking principle in whole or in part:

States	Year adopted	1860	
		Stocks held	Circulation
New York	1838	$26,897,874	$29,959,506
Michigan	1849	192,831	222,197
New Jersey	1850	962,911	4,811,832
Virginia	1851	3,584,078	9,812,197
Illinois	1851	9,826,691	8,981,723
Ohio	1851	2,153,552	7,983,889
Indiana	1852	1,349,466	5,390,246
Wisconsin	1854	5,031,504	4,429,855
Missouri	1856	725,670	7,884,885
Tennessee	1852	1,233,432	5,538,378
Louisiana	1853	5,842,096	11,579,313
Iowa	1858	101,849	568,806
Minnesota	1858	50,000	50,000
Massachusetts	1859	.....	.....
Total	.....	57,951,954	97,212,827

V. Currency and Coinage

A. *Currencies and their Movements, 1852* [1]

The movement of coin and bank notes during the period 1836–1849 indicates several important monetary laws as follows: (1) seasonal demands for money; (2) tendency of a cheaper money to drive a dearer money out of circulation; and (3) settlement of balances of trade.

Our foreign commerce has not only affected the specie in our country, but it has had a general influence also upon the circulation of our banks. Prior to the acquisition of California in 1848, the production of gold and silver annually by our mines, was but little over half a million of dollars. About $2,000,000 more than the products of our mines were needed annually to satisfy the pride of the people, and supply them with utensils and ornaments; and to keep pace with the increase of our population, requires an increase of coin of $2,500,000 annually; so that we needed about $5,000,000 annually to supply the wants of the country, and have a sufficient specie basis to sustain our banks, and maintain the credit of our paper currency. The amount of specie in the United States is so exceedingly small, in proportion to the population and commercial wants of the country, that large importations of foreign goods, and an exportation of specie to the amount of $4,000,000 or $5,000,000 a year, for two or three years in succession, will inevitably weaken the banks very much, produce a panic, and a run upon many of them, and cause many failures, if not a general suspension of specie payments. This is verified by the commercial revulsion from 1837 to 1842. In May, 1837, nearly all the banks in the United States suspended specie payments; during the year ending September 30th, 1838, our imports amounted to but $108,486,616, including $17,747,116 specie, and but little over $90,000,000 in merchandise and foreign products; our exports the same year amounted to $113,717,404, including but $3,508,046 in specie — that is we exported exclusive of specie, over $110,000,000 in amount, and imported but little over $90,000,000; paid off several millions of debts, and got a balance of over $14,000,000 specie to sustain our banks. This enabled nearly all the banks in the old States, and many in the new ones, to resume specie payments during the spring and summer of the year 1838, and to go on for some time prosperously; but the free-trade compromise act again invited large importations of foreign goods, amounting, during the year ending September 30th,

[1] *Essays on the Progress of Nations.* By Ezra C. Seaman (New York, 185?), 262–4.

1839, to $162,092,132, including only $5,595,176 in specie; while our exports were but $112,251,673, exclusive of specie to the amount of $8,776,743; showing a nominal balance of trade against us that year of about $44,000,000; a drain of over $3,000,000 of specie from the country, and a large increase of our foreign debt.

This large balance of trade against us and drain of specie, occasioned a second suspension of specie payments on the 9th of October, 1839, by Mr. Biddle's United States Bank of Pennsylvania, which was soon after followed by nearly all the banks south and west of the State of New York. No other country ever felt so quickly and sensibly, and suffered so severely, the disastrous effects of excessive importations of foreign goods, and an unfavorable balance of trade; for no other country ever had so small an amount of specie in proportion to the extent of their commerce; and in no other country was the credit system ever carried to so great an extent, upon a foundation so slight and frail.

The amount of specie in the United States, October 1st, 1839, being about $73,000,000, and October 1st, 1842, but $62,000,000, in round numbers; the quantity in the banks $45,000,000, in 1839, and but $33,545,000, December, 1842, averaging about $39,000,000, left in circulation, including what was hoarded up and withdrawn from use, from $28,000,000 to $29,000,000.

When specie is exported it is withdrawn entirely from the vaults of the banks in the commercial cities, and they draw the specie from the banks of the country and the interior cities, and the amount in circulation is scarcely affected at all Export two years in succession to pay for foreign goods, $5,000,000 each year more specie than is imported, accompanied by a great increase of debt by means of heavy importations, these $10,000,000 being withdrawn from the banks, reduces their specie to about $30,000,000, and this, of itself, will often produce a panic and a run upon the banks, and cause a draw upon them of $5,000,000 or $10,000,000 more, and thereby occasion a failure of many of them, and perhaps a general suspension of specie payments. The suspension of October, 1839, was occasioned by the exportation of specie, and the heavy importations of goods the previous year, though the balance of specie exported was but little over $3,000,000; and the suspension of May, 1837, was in consequence of the immense importation of foreign goods; the rapid accumulation of a heavy foreign debt, and the anticipation of large exportations of specie to pay it; the great expansion of the banks, and their heavy loans to speculators who could not pay. All these things contributed to create

a panic, and induce a withdrawal of deposits, and a run upon the banks, and soon led to a general suspension of specie payments in self defence, and before the anticipated exportation of specie to pay our foreign debt has commenced. . . .

Statement of the amount of bank-notes issued to each inhabitant, and the estimated amount of coin and bank-notes in circulation, in each of the following divisions of the United States, at the date of their reports nearest to the last day of December of each of the undermentioned years.

	1836	1842	1842	1845	1845	1849
			Coin and			
	Bknts.	Bknts.	Bknts.	Bknts.	Bknts.	Bknts.
Maine, N. Hamp. & Vt.	$ 5½	$ 2⅔	$ 4	$ 4	$ 5½	$ 5
Mass., Rhode Is., & Conn.	15⅔	9⅝	11	18	19½	16
N. York, N. Jersey, & Pa.	12	4⅛	5⅝	6¾	8½	7
Ohio & other Northwestern States, including Iowa	5⅜	1⅞	3¼	2	3½	2⅞
Del., Md., Dist. of Col., Va. & N. Car.	6⅞	3⅜	4⅞	5⅜	7	6
Ky., Tenn., & Mo.	4⅜	2⅓	4	5	6¼	5
Slave States South of 35° of latitude.	14¾	4⅛	5½	4	6¾	5⅛
United States	9½	3⅝	5	5⅜	7⅛	5⅞

For some months, annually, after harvest, including the fall and forepart of the winter, the bank-notes of the commercial and manufacturing States are sent into the agricultural States to pay for agricultural products; and during that portion of the year, the circulating money of the agricultural States is greater than is indicated in the above table; but the merchants soon collect the greater portion of it and send it to the commercial cities to pay for goods; so that during half or more of the year, it is much less, and perhaps did not average more than is above stated, during the years referred to.

Bank paper being a cheaper currency than coin, its natural tendency is to displace coin, and induce its exportation and consumption in the arts. The balance of trade being generally in favor of manufacturing and commercial, and against agricultural States, the tendencies of trade are to drain the latter of their coin, and to transfer it to the former. The products of manufacturing labor, when sold in the markets of the commercial world, amount to about twice as much as those of agricultural labor employed in either cold or temperate

climates; but not so when the latter is employed in the culture of cotton, sugar, coffee, and other tropical products, in a soil and climate adapted to them. Labor employed in mining and manufacturing in Great Britain, or in the United States, is more than twice as productive as agricultural labor can be made in Ohio and the North-western States. In fact, the average income of the people of the manufacturing States of Massachusetts and Rhode Island, and of Great Britain, is more than twice as great as that of the agricultural State of Ohio, and nearly twice as great as that of the agricultural State of Vermont.

A majority of mankind are inclined to spend all they can earn, and all they can get credit for, and as the wants of agricultural communities are generally greater than their incomes, they often buy more than they can pay for with their crops within the year; and hence agricultural countries are usually involved in debt; the balance of trade is almost universally against them; and this drains them of the precious metals, and tends to depress their industry and the price of their products still more. Poverty, and nothing but poverty, a want of ability to pay promptly, and a loss or diminution of credit, tends to check importations, and to restore the balance of trade, by lessening the demand for, and the price of goods, and the inducement to import them.

As long as the balance of trade is against a country, it must either export its specie to pay such balance, or buy on credit, accumulate a debt, and eventually be drained of its specie to pay interest, as well as the principal of the debt. Bank-notes may, for a time, supply the place of coin, and thus afford a temporary remedy; but, in the end, they aggravate the evil. By inflating the currency in some instances, and in others keeping it full, they keep up, and often raise the price of both domestic and foreign products, and thereby tend to prevent the exportation of domestic products; to encourage importations; to increase both the quantity and value of goods imported, and exports of specie to pay for them; and to diminish the industry of the country by depriving its own citizens of the benefit of its markets for their products. The necessary consequence is, a run upon the banks for coin, a great diminution in their circulation, many failures of banks, and numerous bankruptcies among the people, attended with a depression of property and industry, and wide-spread embarrassment throughout the country. Such a revulsion necessarily checks importations for a time, and as exportation goes on as usual, the balance of trade is eventually turned in its favor; specie again flows in, and the country partially recovers from its embarrassment.

B. *Early Coinage, 1791–1840* [1]

The first coinage act of the United States, which was passed in 1792, provided for the coinage of gold, silver and copper coins. The important provisions of this act and those which followed during the next forty years were as follows:

On the 2d April, 1792, a code of laws was enacted for the establishment and regulation of the mint, under which, with slight amendments, the coinage was executed for forty-two years.

The denominations of coin, with their rates, were as follows: —

Gold. The eagle of ten dollars, to weigh 270 grains, the half and quarter in proportion; all of the fineness of 22 carats, or 917 thousandths.

Silver. The dollar of 100 cents, to weigh 416 grains; the half, quarter, tenth or dime, and twentieth or half-dime, in proportion; the fineness to be 1485 parts in 1664, or 892.4 thousandths.

Copper. The cent, to weigh 264 grains; the half-cent in proportion.

Since the act of 1792, the following alterations in the standards have been made: —

On the 14th January, 1793, the weight of the cent was reduced to 208 grains; the half-cent in proportion.

January 26th, 1796. President Washington issued a proclamation (as he had been empowered to do by law,) that, "on account of the increased price of copper, and the expense of coinage," the cent would be reduced to 7 dwts. or 168 grains, and the half-cent in proportion. The copper coins have since remained at this standard.

June 28th, 1834. An act was passed, changing the weight and fineness of the gold coins, and the relative value of gold to silver. Before stating the alterations, it may be proper to observe, that the estimate of gold as being worth fifteen times as much as silver, which was the original basis, was found too low at the market value; which, although always fluctuating, was nearer sixteen to one, upon a general average. The effect of our legal proportions was to reduce the coinage of gold, and to restrain its circulation; being always at a premium, the coin was immediately exported to Europe, in the course of trade, and there quickly wrought into other shapes.

To provide a remedy for this evil, engaged the attention of some of our most eminent statesmen for a series of fifteen years. At length, in June, 1834, the weight of the eagle was reduced by law to 258 grains, (the parts in proportion,) of which 232 grains must be fine gold, making the fineness 21 carats 2 $\frac{1}{4}\frac{4}{8}$ car. grains, or $899\frac{225}{1000}$ thousandths.

[1] *Hunt's Merchants' Magazine* (New York, 1844), X, 244–6.

This was an increase of 6 $\frac{63}{100}$ per cent on the former value of gold. The silver coinage was not changed.

The disadvantages of the complex standards of fineness, both in gold and silver, which were difficult to be expressed or remembered, and very inconvenient in regard to the frequent calculations which were based upon them, early determined the present director to endeavor to effect an improvement. The standard of nine-tenths fine, as adopted in France and some other countries, was obviously the most simple, and, upon every consideration, the most suitable. To bring our silver coins to that porportion, without changing the amount of fine silver in them, it was only necessary to put less copper, by $3\frac{1}{2}$ grains, in the dollar, reducing its weight to $412\frac{1}{2}$ grains. The weight of the gold was not to be changed, but the fineness increased about three-fourths of one thousandth, a difference far within the scope of the legal allowance, and of course hardly appreciable. These proportions were incorporated in a carefully digested and consolidated code of Mint Laws, which was enacted by Congress, in January, 1837. By that act, the eagle is to be 900 thousandths fine, and to weigh 258 grains; the half and quarter in proportion; and the [silver] dollar, at the same fineness, to weigh $412\frac{1}{2}$ grains; the parts in proportion. The allowed deviation in fineness, for gold, is from 898 to 902; for silver, 897 to 903.

The following is a recapitulation of the various standards, of the gold and silver coins: —

	Gold Eagle		Silver Dollar	
	Weight, Grains	Fineness, Thous.	Weight, Grains	Fineness, Thous.
Act of April 2, 1792	270	916.7	416	892.4
Act of June 28, 1834	258	899.2	.....	.....
Act of January 18, 1837	258	900	412.5	900

It will be proper, in concluding this article, to explain briefly the organization of the mint of the United States. Until the year 1835, there was but one institution, which was located at Philadelphia. In that year three *branches* of the mint were created by act of Congress. Two of these were for the coinage of gold only, and were to be situated at the towns of Charlotte, in North Carolina, and Dahlonega, in Georgia — central points of the gold mining region. The third branch was for both gold and silver, and located at New Orleans,

the commercial emporium of the southwest. These three institutions, which, in the view of the law are not distinct mints, but rather branches of the mint, are respectively managed by superintendents, who are under the control of the director of the parent mint. The branches went into operation in the year 1838. Their coinage is uniform with that of the establishment at Philadelphia, being systematically tested there for approval.

The whole mint establishment, thus constituted, is itself a bureau or branch of the treasury department of the general government, and is under the supervision of the secretary of the treasury.

The coinage at the principal mint in 1843 amounted to $6,530-043 20; comprising $4,062,010 in gold, $2,443,750 in silver, and $24,283 20 in copper coins, and composed of 10,405,233 pieces. The deposites of gold, within the year, amounted to $4,107,807, and those of silver to $2,357,830.

At the New Orleans branch mint, the coinage amounted to $4,568,000; comprising $3,177,000 in gold, and $1,391,000 in silver coins, and composed of 4,030,239 pieces. The deposites for coinage amounted to $3,138,990 in gold, and $1,384,320 in silver.

The branch mint at Dahlonega received, during the year, deposites of gold to the value of $570,080, and its coinage amounted to $582,-782 50; composed of 98,452 half-eagles, and 36,209 quarter-eagles.

The branch mint at Charlotte received deposites of gold to the value of $272,064, and its coinage amounted to $287,005; composed of 44,353 half-eagles, and 26,096 quarter-eagles. . . .

The whole coinage in the United States, during the past year, amounts to within a small fraction of $12,000,000, and exceeds, by more than one-half, that of any former year. Of this coinage, more than $8,000,000 is in gold; showing a greater proportion to silver than has heretofore been presented.

The branch mints at Charlotte and Dahlonega have each coined nearly double the amount which they have reached in any former year, and the New Orleans mint nearly quadruple.

VI. State Debts

Amount and Character in 1852 [1]

The attempts of the states to build internal improvements very generally failed, and as a consequence they found themselves burdened with heavy debts. In 1852 the debts and resources of the different states were as follows:

[1] *Report of the Commissioner of Patents for the Year 1852* Agriculture. (Washington, 1853), 418–19.

States	Total debt	Annual interest on absolute debt	Amount of school fund	Other productive property	Other property not now productive	Ordinary annual expenditure excluding debts and schools
Maine	$600,000	$36,000	$350,000	$700,000	.....	$159,000
New Hampshire	75,000	4,000	.....	.....	.....	80,000
Vermont	.....	.....	.....	.....	.....	100,000
Massachusetts	6,391,000	63,000	955,000	7,821,000	$1,607,000	500,000
Rhode Island	382,000	.....	56,000	.....	.....	50,000
Connecticut	91,000	1,000	2,045,000	406,000	.....	115,000
New York	22,623,000	1,230,000	6,612,000	35,115,000	.....	750,000
New Jersey	71,000	4,000	373,000	279,000	764,000	90,000
Pennsylvania	40,114,000	2,014,000	.....	31,639,000	321,000	350,000
Delaware	.....	.....	225,000	190,000	.....	11,000
Maryland	15,260,000	650,000	148,000	11,212,000	16,319,000	170,000
Virginia	17,575,000	812,000	1,132,000	7,060,000	6,052,000	600,000
North Carolina	977,000	.....	.....	.....	.....	75,000
South Carolina	3,144,000	110,000	.....	5,000,000	.....	115,000
Georgia	1,828,000	110,000	262,000	10,000	15,000	131,000
Florida	.....	.....	.....	.....	.....	45,000
Alabama	6,742,000	418,000	1,075,000	700,000	.....	100,000
Mississippi	7,271,000	136,000	.....	.....	2,000,000	130,000
Louisiana	11,492,000	70,000	.....	.....	2,416,000	515,000
Texas	12,436,000	.....	.....	.....	.....	100,000
Arkansas	1,506,000	90,000	.....	.....	.....	35,000
Tennessee	3,352,000	189,000	1,347,000	4,837,000	1,101,000	165,000
Kentucky	5,726,000	343,000	1,400,000	6,000,000	.....	250,000
Ohio	17,339,000	1,024,000	1,754,000	18,000,000	.....	200,000
Michigan	2,529,000	150,000	500,000	628,000	.....	125,000
Indiana	6,907,000	300,000	4,644,000	.....	.....	80,000
Illinois	16,627,000	.....	790,000	5,000,000	.....	125,000
Missouri	922,000	65,000	575,000	382,000	.....	110,000
Iowa	79,000	5,000	132,000	.....	.....	25,000
Wisconsin	.....	.....	765,000	.....	.....	20,000
California, 1852	485,000	.....	.....	.....	.....	500,000
Total	202,557,000	7,796,000	25,170,000	134,982,000	30,598,000	5,812,000
Total near January 1, 1851	201,541,000	7,555,000	20,456,000	134,936,000	29,855,000	5,812,000
Total near January, 1850	209,305,000	7,677,000	21,542,000	125,369,000	27,584,000	5,673,000
Total near January, 1849	211,252,000	7,884,000	21,420,000	118,508,000	28,236,000	5,258,000
Total near January, 1848	205,708,000	8,521,000	20,338,000	111,638,000	31,498,000	5,062,000
Total near January, 1847	216,911,000	9,072,000	17,631,000	108,643,000	30,660,000	5,435,000
Total near January, 1846	224,023,000	9,930,000	16,608,000	110,306,000	23,232,000	5,455,000

CHAPTER XVI

POPULATION AND LABOR, 1820–1860

I. Condition of the American Laborer

A. *Prosperity of the American Laborer, 1836* [1]

Travelers in the United States before the Civil War often remarked about the prosperous condition of the American laborer. There was no great wealth in the hands of individuals; and there was little poverty. There was plenty of food and clothing for all and those necessities were very evenly distributed. Conditions that obtained in Europe among the working classes were almost unknown in the United States, where laborers were scarce and wages relatively high. An English traveler, the Honorable Charles Augustus Murray, gave his impressions of the situation as follows:

In examining the structure of society in any country, it would seem natural to commence with that class which forms its basement or foundation. If such be the proper course in examining the condition of other countries, more especially must it be so in America, where the operative or labouring class is possessed of privileges and power so great as to render it, in fact, master both of the government and of the constitution. I am well aware that the phrase "labouring class" is distasteful in the United States to those to whom it is applied; but that is of little consequence, so long as the reader understands that I use it in reference to all labourers and artisans, and to those in general who earn their daily bread by the sweat of their brow. It is this class, this broad basis of society, which strikes the traveller in America with the greatest surprise and admiration, and of which the native American may be justly proud. Pauperism, that gaunt and hideous spectre, which has extended its desolating march over Asia and Europe, destroying its victims by thousands, even in the midst of luxury and wealth, has never yet carried its ravages into the United States: this is a blessing of which it is to be feared that few appreciate the magnitude, and which is, of itself, a preponderating weight in the balance of national happiness.

[1] *Travels in North America.* By Charles Augustus Murray (London, 1839), II, 297-8.

Among the thousands and tens of thousands whom the tide of emigration annually pours into the Atlantic seaports, and many of whom arrive without money or friends, or health, or skill wherewith to procure subsistence, great numbers suffer the extremities of hardship and want, especially in the neighbourhood of the towns where they are set ashore; but these cases can have no reference whatever to the internal condition of the United States; and it is a fact no less surprising than pleasing to record, that, during two years spent in traveling through every part of the Union, I have only once been asked for alms, and that once was by a female who was very unwell, and who, although decently dressed, told me that she wanted a bit of money to buy some food.

B. *Unfavorable View of American Labor, 1843*[1]

There were those, however, who took a pessimistic view of American laboring conditions, due in some cases to a preconceived determination to see only the worst side, and in other cases to disappointments, caused by not finding conditions as favorable as they expected them to be.

[January 20] . . . It is much easier to obtain employment, at present, in the United States than in England; but in this respect they are getting into a worse and worse condition. The manufacturers, in the East, have introduced all our improvements in machinery, (and the effects are the same as in this country) they are making very large quantities of goods; competition is increasing, prices are very much reduced, and the wages of labour, generally, throughout the States and Canada, have been reduced from thirty to fifty per cent within the last four years, and wages are still reducing in some parts of the country, in spite of their trades' unions and democratic institutions; and, if competition continue, no parties can prevent wages from falling as low there as they are in England, and this within a comparatively short period. Wages in America are not much higher, even now, than they are with us. Agricultural labourers can be hired, in Illinois and other states, for from eight to twelve dollars per month. Smiths and mechanics for from twelve to eighteen dollars per month, with board. The boarding of labourers of all kinds is almost universal in the small towns and villages in the agricultural districts. They think nothing of board and lodging in the west; it can be found them well for from $1 to $1.50 or 4 s. to 6 s.

[1] *Documentary History of American Industrial Society.* Edited by John R. Commons and others (Cleveland, 1910), VII, 47–51. Printed by permission of the publishers, The Arthur H. Clark Company.

per week. At Baltimore iron works the labourers earn about 2 s. 8 d per day, and the head men, at the furnaces, get about $1, or 4 s. per day. In Pittsburg the wages of the labourers, at the iron works, is about the same. A few of the principal workmen, at the iron works, earn as much as $2 per day. At the founderies and engineering establishments, at Paterson, near New York, the average wages of labour throughout the works is only about 4 s. 6 d. per day now; and this may be taken as a fair average of the wages of engineers [machinists] and founders, in the eastern cities; great numbers were out of employ when I landed, in May last; but the trade is much better, and very few are out of work now. In the great lead district of Galena there are about 40 smelt works, and first-rate smelters earn 25 s. per week; second-rate smelters, 18 s. per week; labourers at the smelt works, 16 s. per week, and carters, 15 s. per week, all without board; but wages are paid in Galena with cash, not in truck, as in most places. The miners were getting 5 s. 8 d. per 112 lbs. for their lead ore, and pig lead was selling at 9 s. 6 d. per cwt., 112 lbs. The wages of labour was double what it is now, in Galena, in 1838. Great quantities of sale shoes and boots are made in and about Salem, in Massachusetts; the workmen can earn only about 16 s. per week; and the shoes are sold as cheap as sale shoes are sold in England. Tailors generally get good wages, but they are not usually well employed; their wages are about 6 s. per day. Bricklayers, stonemasons, and plasterers earn as much as tailors. This will give some idea of the rate of wages.

The price of fuel, and the rents of houses for labourers are very high in all the eastern states; food is also much higher there than in the west. It is highest at Boston and New York, but even there, food is from 25 to 50 per cent cheaper than in Liverpool. Rents are high in all parts of the Union, and clothing is higher than it is with us. Wood fuel can be had for merely the expense of cutting and preparing in most parts of the west. On the banks of the Ohio and Mississippi the steam-boats are supplied at from 4 s. to 6 s. per cord of 8 feet by 4 feet, and 4 feet high, and coals can be had at Pittsburg, and on the Ohio, for less than 5 s. per ton. Pork, beef, and mutton are bought in Indiana, Illinois, and other western states, at from 1 d. to 1½ d. per lb. Our friend C. F. Green, killed a cow in New Harmony while we were there, and he could scarcely sell it at that price, on credit. A whole carcass of good mutton sells there for a dollar, eggs are sold at 2 d. per dozen, good fowls at 4 s. per dozen, butter at 3 d. to 4 d. per lb., Indian corn 7 d. to 10 d. per bushel, wheat at $.5c

to $.60 or 2s. to 2s. 6d. per bushel. Most of these articles are more than double these prices in the eastern states, owing to their not growing enough for themselves, and the expense of carriage from the far west. Apples, pears, peaches, &c., are very plentiful and very cheap in the west. We saw whole orchards of fine apples in Indiana and Kentucky rotting on the trees, not being considered worth the expense of gathering. The same evil exists in the western states of America, as respects agricultural produce, as we find in England as to manufactured goods; excessive competition, and consequent reductions in wages, have driven so many from the eastern states, to cultivate land in the west, added to the shoals of emigrants daily arriving from other countries, that the produce is so abundant, it can scarcely be sold for the expense of taking it fifty miles to a market, and prices will still go lower and lower as more and more land is brought into cultivation, till the man who cultivates his own land will not be able to get a living, as is now the case with our friend C. F. Green, with a most beautiful and fertile farm of 140 acres freehold.

One of the greatest evils the working classes have to contend with in the United States and in Canada, for it is generally practised in both countries, is the abominable cheating truck system, which is carried on with more barefaced impudence there, and to a greater extent than it ever was practised in this country. The following is a verbatim copy of a printed notice given by Ben. Cozzens, a large manufacturer, who has two large cotton factories and a print work, and employs from a thousand to fifteen hundred pair of hands, at Crompton mills in Rhode Island. Single men at board, who cannot take goods, have ten per cent deducted from their wages in lieu of it.

NOTICE. Those employed at these mills and works will take notice, that a store is kept for their accommodation, where they can purchase the best of goods at fair prices, and it is expected that all will draw their goods from said store. Those who do not are informed, that there are plenty of others who would be glad to take their places at less wages.

BENJ. COZZENS.

Crompton Mills, February, 1843.

One of the printed notices, from which this was copied, was put into my hands by a man who lately worked for Benjamin Cozzens, and who has returned home, tired of America, in the Roscius. Five colliers returned home by the same vessel, who had been working at Pittsville, in Pennsylvania, where the same vile truck system is carried on to the greatest extent. They declared that when their American wages were turned into cash, they could earn as much, and

were as well off, in their own country. I know the general prevalence of this system, by information from masters as well as men. The average of loss to the workmen by this system is not less than twenty-five per cent of their wages, and in many cases it is attended with a loss of fifty per cent. When masters have no shops of their own, they give notes to the men to get their goods at other shops, who supply them with inferior articles at high prices, and out of the money the workmen are cheated of, they allow a per centage to the master. In many places the shopkeepers will not give flour and groceries for these notes; they tell them these are cash articles only, in which case the men are compelled to take other goods which they do not want, and then have to submit to a still greater loss in disposing of them for cash to get absolute necessaries. At Shreeve's iron and nail works, in Cincinnati, and at other cut nail works, the workmen are paid in casks of cut nails, charged at high prices, by which they lose at least twenty-five per cent in all they receive. When I told the masters that we have severe laws against this infamous practice; they replied, "Here we do as we like; ours is a free country." Yes, America is as free for working men as England, for in both countries, when trade is bad, the workmen must labour on such terms as are offered, or go without employment and starve. The condition of the working classes in America, however, is much better at present than it is here; but my conviction, from all I have seen and heard in America, is, that the wages of labour are everywhere falling, and that the condition of the labourer is gradually becoming worse.

II. Improvements in Manufactures

Labor-saving Machinery and the Demand for Labor, 1832 [1]

The introduction of labor-saving machinery has often been opposed by the laborers whom it has displaced. Such opposition in the United States was never as great as it was in England, yet it was present, though neutralized by the scarcity of labor and the abundance of public land. In the long run, however, those displaced by machinery tend the machines or seek employment in new fields.

The objection usually urged against improvements in machinery, is, that the poor are deprived of employment. It is true, that at the introduction of an invention which produces the same quantity with less labour than was before required, some of the labourers are thrown out of employment — but this though a serious evil is a transient one,

[1] *American Quarterly Review* (Philadelphia, 1832), No. XXIV, 312.

and not for a moment to be weighed against the permanent advantages which result from the improvement to the community generally, and particularly to the labourers themselves. The commodity is not only furnished to them in common with others at a cheaper rate, but the lasting effect of every improvement in machinery is, increased employment. This can be proved by innumerable facts — and is a conclusion which might be arrived at by *à priori* reasoning. It has been shown that by the cost of production being diminished the price is diminished; the price being diminished, the demand is increased; if the demand is increased, in order to supply that demand, a proportionably greater quantity of the commodity must be produced, and to produce this augmented supply, a greater number of labourers is required. It has generally been found in practice that the increased demand consequent upon diminished price has been so great, that many more labourers were required to supply it even with the improved machines, than were required to supply the old demand with the old machines, although they required more labourers to work them.

III. The Factory System

A. *Conditions at Waltham and Lynn, 1835*[1]

One of the first important centers of the factory system was Lowell, Massachusetts. Conditions there were good, and apparently typical of the conditions to be found in the other manufacturing centers of textile goods. They have been described from several angles by different observers. Other factory centers in Massachusetts were Waltham and Lynn. The latter place was at an early date — and has continued to be down to the present time — an important center for the manufacture of shoes. Miss Martineau visited these places during the thirties and afterward recorded her impressions as follows:

I visited the corporate factory-establishment at Waltham, within a few miles of Boston. The Waltham Mills were at work before those of Lowell were set up. The establishment is for the spinning and weaving of cotton alone, and the construction of the requisite machinery. Five hundred persons were employed at the time of my visit. The girls earn two, and some three, dollars a-week, besides their board. The little children earn one dollar a-week. Most of the girls live in the houses provided by the corporation, which accommodate from six to eight each. When sisters come to the mill, it is a common practice for them to bring their mother to keep

[1] *Society in America.* By Harriet Martineau (London, 1837), II, 247–50

house for them and some of their companions, in a dwelling built by their own earnings. In this case, they save enough out of their board to clothe themselves, and have their two or three dollars a-week to spare. Some have thus cleared off mortgages from their fathers' farms; others have educated the hope of the family at college; and many are rapidly accumulating an independence. I saw a whole street of houses built with the earnings of the girls; some with piazzas, and green venetian blinds; and all neat and sufficiently spacious.

The factory people built the church, which stands conspicuous on the green in the midst of the place. The minister's salary (eight hundred dollars last year) is raised by a tax on the pews. The corporation gave them a building for a lyceum, which they have furnished with a good library, and where they have lectures every winter, — the best that money can procure. The girls have, in many instances, private libraries of some merit and value.

The managers of the various factory establishments keep the wages as nearly equal as possible, and then let the girls freely shift about from one to another. When a girl comes to the overseer to inform him of her intention of working at the mill, he welcomes her, and asks how long she means to stay. It may be six months, or a year, or five years, or for life. She declares what she considers herself fit for, and sets to work accordingly. If she finds that she cannot work so as to keep up with the companion appointed to her, or to please her employer or herself, she comes to the overseer, and volunteers to pick cotton, or sweep the rooms, or undertake some other service that she can perform.

The people work about seventy hours per week, on the average. The time of work varies with the length of the days, the wages continuing the same. All look like well-dressed young ladies. The health is good; or rather, (as this is too much to be said about health anywhere in the United States,) it is no worse than it is elsewhere.

These facts speak for themselves. There is no need to enlarge on the pleasure of an acquaintance with the operative classes of the United States.

The shoe-making at Lynn is carried on almost entirely in private dwellings, from the circumstance that the people who do it are almost all farmers or fishermen likewise. A stranger who has not been enlightened upon the ways of the place would be astonished at the number of small square erections, like miniature school-houses, standing each as an appendage to a dwelling-house. These are the "shoe shops," where the father of the family and his boys work,

while the women within are employed in binding and trimming. Thirty or more of these shoe-shops may be counted in a walk of half-a-mile. When a Lynn shoe manufacturer receives an order, he issues the tidings. The leather is cut out by men on his premises; and then the work is given to those who apply for it; if possible, in small quantities, for the sake of dispatch. The shoes are brought home on Friday night, packed off on Saturday, and in a fortnight or three weeks are on the feet of dwellers in all parts of the Union. The whole family works upon shoes during the winter; and in the summer, the father and sons turn out into the fields, or go fishing. . . .

B. *Superiority of the Operatives, 1833*[1]

Another English traveler, Patrick Shirreff, "Farmer," visited Lowell in 1835. The superiority of the mill operatives over the same class in England was noticed by this traveler and recorded as follows:

The females engaged in manufacturing amount to nearly 5000, and as we arrived at Lowell on the afternoon of Saturday, we had an opportunity of seeing those connected with some of the largest cotton factories retiring from labour. All were clean, neat, and fashionably attired, with reticules hanging on their arms, and calashes on their heads. They commonly walked arm in arm without displaying levity. Their general appearance and deportment was such that few British gentlemen, in the middle ranks of life, need have been ashamed of leading any one of them to a tea-party. Next day, being Sunday, we saw the young females belonging to the factories going to church in their best attire, when the favourable impressions of the preceding evening were not effaced. They lodge, generally, in boarding-houses, and earn about 8s. 6d. sterling per week, independent of board; serving girls earn about 4s. 3d.

The recent introduction of large manufacturing establishments, thin population, and ample reward of labour, account for the apparent comfort and propriety of the Lowell young women. The situation of the manufacturing class in Britain is very different; nurtured amidst poverty and vice, they toil in crowded and unwholesome factories from infancy, often disregarded by parents and employers, and attaining maturity ruined in constitution and in morals, with few of the sympathies of humanity.

The factories and dwelling-houses at Lowell are mostly composed

[1] *A Tour Through North America.* By Patrick Shirreff (Edinburgh, 1835), 45–6.

of brick, although good building stone is to be had everywhere. The people seem to be influenced by habit in house-building at Lowell; a wooden dwelling-house was being erected where rock, which had been dug from the cellar, was obstructing its progress, and thousands of loads of stones quarried in forming a railway, were lying at not more than one hundred yards distant. Here I saw a stone arch building across a lateral branch of the canal, which was the only bridge of that material I saw — wood generally being used for their construction. Many large sized dwelling-houses and factories were in the progress of erection.

C. *Home Life of the Mill Operatives, 1854*[1]

The home life of the mill operatives appears to have been exceptionally good, and it attracted the attention of English travelers, whose ideas of factory life and work were gathered from the squalid surroundings of the Manchester (England) factories.

Furnished with letters from Mr. Abbott Lawrence, I visited Lowell, famous for its factories belonging to a corporation, and for its factory girls, better known by the more elegant title of the "young ladies" of Lowell. About an hour's railway drive brought me to that phenomenon to an Englishman, a smokeless factory town canopied by an Italian sky. Here, water, pure, sparkling, and mighty in strength, from the Merrimack river, does the duty of steam-engines, driving huge wheels and turbines attached to enormous factories. To describe these is unnecessary, as they differ but little in their internal economy from those in our manufacturing districts. There are eight manufacturing corporations and thirty-five mills, which produce 2,139,000 yards of piece-goods weekly, consisting of sheetings, shirtings, drillings, and printing cloths. These are fully equal in quality to similar goods manufactured in England. Not being in the trade, the "young ladies" interested me more than the spinning-jennies or looms; and, before I had gone through one mill, I was ready to admit that the difference between a Manchester factory girl and a Lowell "young lady," is great indeed. The latter is generally good-looking, often pretty, dresses fashionably, wears her hair *à l'Impératrice* or *à la Chinoise*, and takes delight in finery, and flowers, which give a gay appearance to the factory rooms. But it would be unfair to institute a comparison between the Manchester and Lowell

[1] *A Vacation Tour in the United States and Canada.* By Charles Richard Weld (London, 1855), 50–3.

factory girl; as the former is born in that hard school where work is a life-long taskmaster, while the latter is generally the daughter or relative of a substantial farmer, who enters the mills for the purpose of gaining a little independence, and seldom remains there more than a few years. Thus the employment takes higher rank than with us, and the "young ladies" live in a manner that would greatly astonish an English factory girl. Requesting permission to see one of the Lowell boarding-houses, where the "young ladies" reside, I was directed to the establishment usually shown to visitors; but, conceiving it desirable to step aside from the beaten track, I knocked at the door of a different house. The residences of the "young ladies" are excellent, forming rows separated by wide streets, shaded by a profusion of trees, and bright with flowers. My request to be permitted to see the house did not meet with ready assent. After some parley with the servant, the mistress appeared, and made particular inquiries respecting the object of my visit, adding, it was not her custom to show her house to strangers. This made me the more desirous of gaining admission; and having succeeded in satisfying the lady I was merely a curious Englishman, she allowed me to enter, and took great pains in showing me her establishment, assuring me had she been aware of my visit she would have put her house in order. But it needed no preparation to convince me the "young ladies" are admirably provided for. A large sitting-room occupied a considerable portion of the basement floor, beyond which was the refectory; above were airy bedrooms, well furnished, containing from two to four beds. The provisions, which my conductress insisted I should taste, were excellent; and when I add the "young ladies" are waited on, and have their clothes washed, with the exception of their laces, &c., which they prefer washing themselves, it will be seen they are very comfortable. For their board and lodging they pay six dollars a month, one-sixth of which is paid by the corporation; and as their average earnings are about three and a half dollars a week, it is evident that, if not extravagant in their dress, they have it in their power to save a considerable sum yearly. But I fear, from the number of gay bonnets, parasols, and dresses which I saw in the "young ladies' " apartments, a large proportion of the weekly wages is spent on these objects. At the same time it is right to add that the strictest propriety reigns throughout their community, comprising 1870 females; and it was gratifying to hear that, although the famous *Lowell Offering* periodical has been discontinued, the books borrowed from the town library, for the use of which half a dollar is paid yearly,

are of a healthy literary nature. The total number of operatives at Lowell when I visited it was nearly 10,000, and their savings invested in the bank of deposit 1,104,000 dollars.

D. *Hours of Labor, 1845*[1]

There was, however, a dark side to the picture presented by our English travelers. The hours of labor were long and the work arduous, and even though conditions at Lowell were better than those to be found in English mills, they merited and received the criticism of a legislative investigating committee in 1845. That part of the committee's report dealing with hours of labor is as follows:

During our short stay in Lowell, we gathered many facts, which we deem of sufficient importance to state in this report, and first, in relation to the Hours of Labor.

From Mr. Clark, the agent of the Merrimack Corporation, we obtained the following table of the time which the mills run during the year.

Begin work. From 1st May to 31st August, at 5 o'clock. From 1st September to 30th April, as soon as they can see.

Breakfast. From 1st November to 28th February, before going to work. From 1st March to 31st of March, at $7\frac{1}{2}$ o'clock. From 1st April to 19th September, at seven o'clock. From 20th September to 31st October, at $7\frac{1}{2}$ o'clock. Return in half an hour.

Dinner. Through the year at $12\frac{1}{2}$ o'clock. From 1st May to 31st August, return in 45 minutes. From 1st September to 30th April, return in 30 minutes.

Quit work. From 1st May to 31st August, at 7 o'clock. From 1st September to 19th September, at dark. From 20th September to 19th March, at $7\frac{1}{2}$ o'clock. From 20th March to 30th April, at dark.

Lamps are never lighted on Saturday evenings. The above is the time which is kept in all the mills in Lowell, with a slight difference in the machine shop; and it makes the average daily time throughout the year, of running the mills, to be twelve hours and ten minutes.

There are four days in the year which are observed as holidays, and on which the mills are never put in motion. These are Fast Day, Fourth of July, Thanksgiving Day, and Christmas Day. These make one day more than is usually devoted to pastime in any other place in New England. The following table shows the average hours of work per day, throughout the year, in the Lowell Mills.

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[1] *Documentary History of American Industrial Society.* Edited by John R. Commons and others (Cleveland, 1910), VIII, 141–2. Printed by permission of the publishers, The Arthur H. Clark Company.

	Hrs.	Min.		Hrs.	Min.
January	11	24	July	12	45
February	12	..	August	12	45
March	11	52	September	12	23
April	13	31	October	12	10
May	12	45	November	11	56
June	12	45	December	11	24

E. *An Unfriendly View, 1846* [1]

Despite the superiority of the American operatives and the relatively high wages received by them, there were agitators who professed to believe that factory conditions in the United States were far worse than they really were. The following criticism of the conditions at Lowell was published in 1846:

We have lately visited the cities of Lowell and Manchester, and have had an opportunity of examining the factory system more closely than before. We had distrusted the accounts, which we had heard from persons engaged in the Labor Reform, now beginning to agitate New England; we could scarcely credit the statements made in relation to the exhausting nature of the labor in the mills, and to the manner in which the young women, the operatives, lived in their boarding-houses, six sleeping in a room, poorly ventilated.

We went through many of the mills, talked particularly to a large number of the operatives, and ate at their boarding-house, on purpose to ascertain by personal inspection the facts of the case. We assure our readers that very little information is possessed, and no correct judgments formed, by the public at large, of our factory system, which is the first germ of the Industrial or Commercial Feudalism, that is to spread over our land. . . .

In Lowell live between seven and eight thousand young women, who are generally daughters of farmers of the different States of New England; some of them are members of families that were rich the generation before. . . .

The operatives work thirteen hours a day in the summer time, and from daylight to dark in the winter. At half past four in the morning the factory bell rings, and at five the girls must be in the mills. A clerk, placed as a watch, observes those who are a few minutes behind the time, and effectual means are taken to stimulate to punctuality. This is the morning commencement of the indus-

[1] *Documentary History of American Industrial Society.* Edited by John R. Commons and others (Cleveland, 1910), VII, 132–5. Printed by permission of the publishers, The Arthur H. Clark Company.

trial discipline — (should we not rather say industrial tyranny?) which is established in these Associations of this moral and Christian community. At seven the girls are allowed thirty minutes for breakfast, and at noon thirty minutes more for dinner, except during the first quarter of the year, when the time is extended to forty-five minutes. But within this time they must hurry to their boarding-houses and return to the factory, and that through the hot sun, or the rain and cold. A meal eaten under such circumstances must be quite unfavorable to digestion and health, as any medical man will inform us. At seven o'clock in the evening the factory bell sounds the close of the day's work.

Thus thirteen hours per day of close attention and monotonous labor are exacted from the young women in these manufactories. . . . So fatigued — we should say, exhausted and worn out, but we wish to speak of the system in the simplest language — are numbers of the girls, that they go to bed soon after their evening meal, and endeavor by a comparatively long sleep to resuscitate their weakened frames for the toils of the coming days. When Capital has got thirteen hours of labor daily out of a being, it can get nothing more. It would be a poor speculation in an industrial point of view to own the operative; for the trouble and expense of providing for times of sickness and old age would more than counterbalance the difference between the price of wages and the expense of board and clothing. The far greater number of fortunes, accumulated by the North in comparison with the South, shows that hireling labor is more profitable for Capital than slave labor.

Now let us examine the nature of the labor itself, and the conditions under which it is performed. Enter with us into the large rooms, when the looms are at work. The largest that we saw is in the Amoskeag Mills at Manchester. It is four hundred feet long, and about seventy broad; there are five hundred looms, and twenty-one thousand spindles in it. The din and clatter of these five hundred looms under full operation, struck us on first entering as something frightful and infernal, for it seemed such an atrocious violation of one of the faculties of the human soul, the sense of hearing. After a while we became somewhat inured to it, and by speaking quite close to the ear of an operative and quite loud, we could hold a conversation, and make the inquiries we wished.

The girls attend upon an average three looms; many attend four, but this requires a very active person, and the most unremitting care. However, a great many do it. Attention to two is as much as

should be demanded of an operative. This gives us some idea of the application required during the thirteen hours of daily labor. The atmosphere of such a room cannot of course be pure; on the contrary it is charged with cotton filaments and dust, which, we were told, are very injurious to the lungs. On entering the room, although the day was warm, we remarked that the windows were down; we asked the reason, and a young woman answered very naively, and without seeming to be in the least aware that this privation of fresh air was anything else than perfectly natural, that "when the wind blew, the threads did not work so well." After we had been in the room for fifteen or twenty minutes, we found ourselves, as did the persons who accompanied us, in quite a perspiration, produced by a certain moisture which we observed in the air, as well as by the heat. . . .

The young women sleep upon an average six in a room; three beds to a room. There is no privacy, no retirement here; it is almost impossible to read or write alone, as the parlor is full and so many sleep in the same chamber. A young woman remarked to us, that if she had a letter to write, she did it on the head of a band-box, sitting on a trunk, as there was not space for a table. So live and toil the young women of our country in the boarding-houses and manufactories, which the rich and influential of our land have built for them.

IV. Experiments in Communism

A. *The Rappites, 1840*[1]

During the period 1808–1860 many experiments in communism were made in the United States. Of the best known of these experiments one was carried out by the Rappites at Economy, Pennsylvania, another by the Owenites at New Harmony, Indiana, and yet others by the followers of Fourier in various parts of the country. An English traveler gives an account of his visit among the Rappites as follows:

The settlement of Economy embraces at present a tract of about 4,000 acres of rich land, on the northern bank of the river Ohio, in the State of Pennsylvania, from 16 to 20 miles below Pittsburgh — the land alone being worth, at 20 dollars an acre, 80,000 dollars, and the dwellings, stores, and larger buildings, 80,000 dollars more — while the stock of grain and cattle, materials of manufacture, machinery, and implements, is thought to be worth 160,000 dollars;

[1] *The Eastern and Western States of America.* By J. S. Buckingham (London, [1842]), II, 212–3, 216–20.

in addition to which, they have in cash, bank-stock, and other descriptions of securities, nearly 200,000 dollars; so as to make the whole property amount to about 500,000 dollars — or 100,000£ sterling, for a community of about 500 persons, equivalent to 1000 dollars each.

The plan of the town is symmetrical; the streets, about 80 feet in breadth, crossing each other at right angles, and lined on each side with trees, but not paved, either at the sides or centre, as there is no thoroughfare of vehicles or passengers in sufficient numbers to render this necessary. The dwelling-houses, of which there are about 100, are small — of two stories chiefly; many of brick, and others of wood — most of them standing separately, and having a large portion of garden-ground attached to them, which is very neatly cultivated. . . .

The property being held in common, no individual lays claim to anything as his own; and as nothing is either bought or sold among themselves, money is of course unnecessary. Stores of various descriptions exist, for the several articles in daily consumption — such as provisions of all kinds, clothing, furniture, &c., all of a simple, but wholesome and substantial kind; and each of these stores is placed under the superintendence of a competent individual. At stated periods in the day or week, the caterer for each family goes to the store, and procures such articles as may be required, and there is no limitation to the quantity to be supplied. Experience soon establishes a sort of standard of probable sufficiency, and this is generally found to be adequate to the regular consumption, beyond which there is no temptation either to hoard or waste. As there is always enough for every one, there is no apprehension of scarcity; and as the habit of care and economy is established both by precept and example, waste would be deemed sinful, and is never practised. It is the same with clothes as with provisions. Only certain articles of apparel, all substantial and good, but simple in colour and form, are made for males and females, from materials woven, and labour supplied, in the place; and whenever any of these garments are required, application to the store is sufficient to obtain them, "without money, and without price."

Persons being thus assured of a full and sufficient supply of good food, good clothing, comfortable shelter, and an equal share of whatever social privileges, or accumulations of property within the community, may be the fruits of this system,— cheerfully give their labour as an equivalent for this; especially as that labour is healthy, light, and in no respect degrading. The men work about ten hours a

day; having breakfast at half-past six — dinner at half-past eleven — and supper at half-past five. The females working in the cotton-factory have only eight hours' labour; and in the dwellings still less, for at nine in the evening every one retires, and they have several hours of leisure in the day. . . .

To them, it is matter of the utmost indifference, whether the Banks suspend payment or redeem their notes in specie — whether trade is flourishing or otherwise — whether bankrupts are many or few — and whether the Whigs or the Democrats prevail. They go on tilling their fields, and reaping their harvest; feeding their sheep, and shearing their wool; growing their fruits, and gathering them in — let the times be what they may. All the materials produced by them are first stored in sufficient quantity for the consumption of their own community, and the rest they send to market. The only things they require to buy, are cotton for their manufactures, and colonial produce for their household supplies; neither of which their soil or climate will admit of their growing. Their own wool and their own silk they work up into cloth, velvets, silks, and satins. Of these also they sell the surplus above what they themselves consume. To avoid all risks, they sell at small profit for ready money; and they purchase their raw cotton, their coffee, tea, sugar, &c., with ready money also, at reduced rates. And as, in every year's transactions, there is a considerable gain to the community — since they always produce much more than they can consume — the excess of gain is expended in the purchase of new land, the erection of new buildings, and the procuring of new stock; or it is otherwise invested in some secure manner, so as to ensure the safety of both principal and interest.

B. *The Owenites at New Harmony, 1830* [1]

The experiment at New Harmony was short lived, and many reasons have been advanced to account for the failure of the experiment. An account of the failure, by an apparently unbiased observer, is as follows:

New Harmony is seated on the banks of the Wabash; and following the sinuosities of that river, it is distant sixty-four or five miles from the Ohio, but over land, not more than seventeen. This settlement was purchased by Messrs. MacClure and Owen from Mr. Rapp, in the year 1823. The Rappites had been in possession of the place for six years, during which they had erected several large brick build-

[1] *A Ramble of Six Thousand Miles Through the United States of America.* By S. A. Ferrall (London, 1832), 92–3, 97–9.

ings of a public nature, and sundry smaller ones as residences, and had cultivated a considerable quantity of land in the immediate vicinity of the town. Mr. Owen intended to have established here a community of union and mutual co-operation; but, from a too great confidence in the power of the system which he advocates, to *reform* character, he has been necessitated to abandon that design at present. . . .

Whilst at Harmony, I collected some information relative to the failure of the community, and I shall here give a slight sketch of the result of my inquiries. I must observe that so many, and such conflicting statements, respecting public measures, I believe never were before made by a body of persons dwelling within limits so confined as those of Harmony. Some of the *ci-devant* "communicants" call Robert Owen a fool, whilst others brand him with still more opprobrious epithets: and I never could get two of them to agree as to the primary causes of the failure of that community.

The community was composed of a heterogeneous mass, collected together by public advertisement, which may be divided into three classes. The first class was composed of a number of well-educated persons, who occupied their time in eating and drinking — dressing and promenading — attending balls, and *improving the habits* of society; and they may be termed the *aristocracy* of this Utopian republic. The second class were composed of practical co-operators, who were well inclined to work, but who had no share, or voice, in the management of affairs. The third and last class was a body of theoretical philosophers — Stoics, Platonics, Pythagoreans, Epicureans, Peripatetics, and Cynics, who amused themselves in *striking out plans* — exposing the errors of those in operation — caricaturing — and turning the whole proceedings into ridicule.

The second class, disliking the species of co-operation afforded them by the first class, naturally became dissatisfied with their inactivity — and the third class laughed at them both. Matters were in this state for some time, until Mr. Owen found the funds were completely exhausted. He then stated that the community should divide; and that he would furnish land, and all necessary materials, for operations, to such of them as wished to form a community apart from the original establishment. This intimation was enough. The first class, with few exceptions, retired, followed by part of both the others, and all exclaiming against Mr. Owen's conduct. A person named Taylor, who had entered into a distillery speculation with one of Mr. Owen's sons, seized this opportunity to get the control of

part of the property. Mr. Owen became embarrassed. Harmony was on the point of being sold by the sheriff — discord prevailed, and co-operation ceased.

C. *Description of a Phalanx, 1849* [1]

In various parts of the United States communistic groups called phalanxes were organized. A description of one of these phalanxes by a friend and supporter follows:

The Wisconsin Phalanx was incorporated February, 1845. The original members were chiefly from Southport, Wisconsin; they possessed no experience in associative life, and had derived their ideas of the theory of Association, principally from the pamphlets and newspaper writings of the school of Fourier. By a clause in the charter of the Phalanx, the increase in the annual appraisal of all the property, real and personal of the Phalanx, exceeding the cost, was to be yearly divided or credited one fourth to stock, and the remaining three fourths to labor, in such manner as the by-laws should provide.

The Domain of the Phalanx contains about one thousand, eight hundred acres of prime land, prairie, oak-openings, groves and meadows, in Ceresco township and vicinity, Fond-du-lac County. This region of country, is not exceeded by any part of the whole State, for beauty of scenery, healthfulness of situation, and fertility of soil. No ague of local origin, has ever been known here, and not one adult male member of the Society, since the institution of the Phalanx, has deceased. Five women have died on the Domain, during the entire existence of the Society; but before their coming to Ceresco, they were all afflicted with the diseases, which proved fatal to them. Several infants and small children, have died from complaints incidental to that period of life; the cause, no doubt, would be found in a want of correct knowledge and physiological treatment in regard to infants and young children; a lack of knowledge certainly not greater here than elsewhere. We are confident that no region in the whole Northwest, can be found more remarkable for continued good health, than Ceresco, and the adjacent country.

There is a good water power on the Domain, the property of the Phalanx; and we have in operation a Grist Mill and a Saw Mill, the

[1] *Documentary History of American Industrial Society.* Edited by John R. Commons and others (Cleveland, 1910), VII. 264–6. Printed by permission of the publishers, The Arthur H. Clark Company.

former of which is kept constantly employed. A new and commodious building, intended for a Protective Union Store, has been erected at the private cost of some of the members, and is nearly sufficiently completed for the commencement of business. There is a good stone school house; a blacksmith shop with three fires in full employment; and buildings for the dwelling of members, one a long new frame house, conveniently and pleasantly arranged, several of the rooms of which are now completed and occupied, and all might be finished within a short time, and at no great expense. Another row of frame houses, not so convenient nor strong in construction, as that just referred to, was put up at the first founding of the Society; and in this latter range of buildings, the greater part of the members yet reside. There is also another row of frame buildings, with a cupola and a bell, a kitchen, a bakery, a large dining room and apartments serving for the accommodation of strangers and travelers. In addition, there is a substantial stone dwelling, sufficiently large for two families, living on the principles of Associative life. The most of these buildings have been constructed with a view to a unitary mode of life; they were designed for temporary use in a transitional state of society and would principally be serviceable for the accommodation of a combined or friendly company, until more suitable and comfortable dwellings were erected. They would contain altogether about thirty-five families, with the usual average number of persons to a family.

V. Character of the People — North and South

The Views of an Englishman with Southern Tendencies, 1860 [1]

Although the people of different sections of the country developed the same general characteristics, those of the people of the northern states differed in detail from those of the people of the south. An Englishman with Southern tendencies has drawn for us the following picture of the people of the different sections:

[Character of the Northern People]

The greatest distinction between the Northern and Southern States of the Union was the tendency of the population of the former to the towns and cities, from the meagreness and unattractiveness of life in the country. And yet it is a beautiful country in many parts — in most parts of New England. Generally speaking, the North, as to healthfulness and scenery, has considerably the advan-

[1] *Ten Years in the United States.* By D. W. Mitchell (London, 1862), 192–6.

tage; and yet the natives don't seem to enjoy rural life; they neither talk nor look as if they did; and those are considered, and consider themselves, fortunate, who abandon it to go and push their fortunes in town. The training of the young, and the notions instilled into them, partly account for this. The quietness and slow profits of farming are not very tempting to a youth who has been brought up to believe that he is as good as anybody else, and that there is no reason why he should not be a millionaire or a President, if he only struggles hard enough; a very unhealthy and irrational, though very popular mode of exciting youth to improve themselves — seeing that there is only room for a very few at the top of the tree.

Arrived in town, the young American looks out for something light and genteel, abandoning hard and dirty work to foreigners. While the West has been calling for labourers, workmen, and agriculturists of all grades, there have been large numbers of superfluous young men hanging about in the large eastern cities, competing for poorly paid employment, principally as "clerks," as shopmen are called.

The universality of education — of ability to read, and write, and figure a little — accounts partly for this tendency. A youth who has been to school, and who has read of the successful struggles of genius with poverty, feels that he is lowering himself, and throwing away his chances of rising in society, by submitting to hard, long-continued physical labour; especially in a climate like that of the Northern States, where the summer heat and winter cold are so exhausting to the system, that after the ordinary ten hours' work, and the time spent in rest and meals, and getting to and from the place of business, the workman has neither leisure nor inclination for intellectual culture by study of any kind. Climate has not yet had time to tell on the population of the United States in general, recruited as it has incessantly been by immigrants from Europe; but by analyzing the population, and observing that portion of it which has been longest and most exposed to the dry land-air, the hot summers, and long, cold winters, and great and sudden meteorological changes of the North, we may see some of the combined effects of the climate and his mode of life and general circumstances on the man of the United States. That portion is the farming population, of Yankee descent.

The type of this class is a rather tall, bony, sinewy, strong man, with very little fat; with none of the English ruddiness of complexion; with a good, full, well-formed head, and a brain above the English average; active, persevering, and full of energy — not a lazy bone

in his body; well marked, intelligent, decided features, highly expressive of a cautious, secretive, determined character; by no means a handsome man, but frequently fine-looking in youth. There is too often about him a look of being overworked both in mind and body, and a want of ease, content, and cheerfulness. His mind is always at work, engaged seriously on something useful or profitable; and he wears himself out with unceasing anxious thought about gaining and saving: not avariciously, but to provide for the future, and to raise himself and his family in the social scale. The most serious faults in his character are too much thought of his own personal independence and dignity, too much jealousy of any superiority, and an unduly excited pride and ambition; to which he sacrifices that little occasional indulgence in careless, hearty, social enjoyment, which is necessary to health of mind and body.

This is, I think, a fair description of the predominant race in the eastern and northern States, and in many parts of the west. The Irish, indeed, interfere seriously with its supremacy, and lately, to a still greater extent, the Germans; but till within the last ten years, this Yankee race gave the tone and character to the legislation of the free-labour States.

[CHARACTER OF THE SOUTHERN PEOPLE]

The typical Southern man is in many respects, though it will hardly be expected, more British and European in habits, appearance, and character. He has plenty on his mind, but he is not so uneasy about his social position, and allows himself more pleasure and social enjoyment — often too much; hence, at forty and fifty, he is well enough off for flesh and fat, but not to excess. What in Europe would be called a fat person is a great rarity in America, and is seldom to be met with, except among the Germans, Englishmen, negroes, and negresses: these last especially; for while among the native-born whites there is a strong tendency to dyspepsia, the blacks seem constitutionally inclined to hyperpepsia.

The preference for rural life, and the love of quiet social intercourse and enjoyment, mainly distinguish the South from the North; in the latter section the want of domestic unostentatious sociableness has been much dwelt upon at times by the press; but excessive devotion to money-making and getting on in the world seems to have become an incurable habit. There are four national holidays — New Year's Day, 4th of July, Thanksgiving Day and Christmas Day,— though, in fact, Christmas is little noticed in the North, while

New Year's Day is not much kept at the South. In an article on this subject, headed, "Are we a happy people?" in a widely-read periodical, it was asked, "How can we get rid of the Fourth Holiday?" it being regarded as an inconvenient interruption: in towns, at least. And one-third of the people of the United States live in towns and cities: in the North, it must be nearly one-half; and in the South a large portion of the few town people live nearly half the year on their property in the country.

VI. Population

Distribution in 1860[1]

The census of 1860 showed several important facts regarding the growth of population during the previous decade and its distribution in 1860. The largest growth had been in the west and southwest, while in one state, Vermont, the increase in population had been less than one per cent. The center of population, however, was in the east, but moving steadily westward.

Though the number of States has increased during the last decennial period from thirty-one to thirty-four, and five new Territories have been organized, the United States has received no accessions of territory within that term, except a narrow strip to the southward of the Colorado river, along the Mexican line, not yet inhabited. As general good health prevailed, and peace reigned throughout the country, there was no apparent cause of disturbance or interruption to the natural progress of population. It is true that the very large immigration from Europe, together with an influx of considerable magnitude from Asia to California, has added largely to the augmentation which the returns show to have taken place during the decade.

In comparing the gain of any class of the population, or of the whole of it, one decade with another, the rate per cent. is not a full test of advancement. The *rate* of gain necessarily diminishes with the density of population, while the absolute increase continues unabated. The actual increase of the entire free and slave population from 1850 to 1860, omitting the Indian tribes, was 8,225,464, and the rate per cent. is set down at 35.46; while from 1840 to 1850 the positive increment of all classes was 6,122,423, yet the ratio of gain was 35.87 per cent. The two decades from 1800 to 1810, and from 1840 to 1850, were marked by the great historical facts of the annexation of Louisiana, and the acquisition of Texas, New Mexico, and Cali-

[1] *Preliminary Report on the Eighth Census, 1860* (Washington, 1862), 3–8.

fornia. Each of these regions contributed considerably to the population of the country, and we accordingly find that during those terms there was a ratio of increase in the whole body of the people greater by a small fraction than shown by the table annexed for the decade preceding the Eighth Census. The preponderance of gain, however, for that decennial term above all the others since 1790, is signally large. No more striking evidence can be given of the rapid advancement of our country in the first element of national progress than that the increase of its inhabitants during the last ten years is greater by more than 1,000,000 of souls than the whole population in 1810, and nearly as great as the entire number of people in 1820. That the whole of this gain is not from natural increase, but is, in part, derived from the influx of foreigners seeking here homes for themselves and their children, is a fact which may justly enhance rather than detract from the satisfaction wherewith we should regard this augmentation of our numbers.

Thus far in our history no State has declined in population. Vermont has remained nearly stationary, and is saved from a positive loss of inhabitants by only one-third of one per cent. New Hampshire, likewise, has gained but slowly, her increment being only 8,097, or two and one-half per cent. on that of 1850. Maine has made the satisfactory increase of 45,110, or 7.74 per cent. The old agricultural States may be said to be filled up, so far as regards the resources adapted to a rural population in the present condition of agricultural science. The conditions of their increase undergo a change upon the general occupation and allotment of their areas. Manufactures and commerce, then, come in to supply the means of subsistence to an excess of inhabitants beyond what the ordinary cultivation of the soil can sustain. This point in the progress of population has been reached, and, perhaps, passed in most, if not all, of the New England States. But while statistical science may demonstrate within narrow limits the number of persons who may extract a subsistence from each square mile of arable land, it cannot compute with any reasonable approach to certainty the additional population, resident on the same soil, which may obtain its living by the thousand branches of artificial industry which the demands of society and civilization have created. This is forcibly illustrated by the returns relative to the three other New England States — Massachusetts, Rhode Island, and Connecticut — which contain 13,780 square miles. The following table shows their population in 1850 and 1860, and its density at each period.

States	1850		1860	
	Population	Number of inhabitants to the square mile	Population	Number of inhabitants to the square mile
Massachusetts	994,514	127.49	1,231,066	157.83
Connecticut	370,792	79.33	460,147	98.42
Rhode Island	147,545	112.97	174,620	133.63
	1,412,851	.....	1,865,833	.....

The aggregate territorial extent of Maine, New Hampshire, and Vermont, is 48,336 square miles; the number of their inhabitants 1,269,450, or 26.26 to the square mile. The stated point of density was passed by the three States named in the table more than fifty years ago, and yet they go on increasing in population with a rapidity as great as at any former period of their history.

South Carolina has gained during the decade 35,201 inhabitants of all conditions, equal to 5.27 per cent. Of this increase 16,825 are whites, and the remainder free colored and slaves. It is perhaps a little remarkable that the relative increase of the free colored class in this State was more considerable than that of any other. As their number, 9914, is so small as to excite neither apprehension or jealousy among the white race, the increase is probably due both to manumission and natural causes. This State has made slower progress during the last term than any other in the south, having advanced only from 27.28 to 28.72 inhabitants to the square mile.

Tennessee, it will be observed, has made but the moderate gain of 10.68 per cent. for all classes. Of this aggregate increase the whites have gained at the rate of 9.24 per cent. upon 1850, the free colored 13.67, and slaves 15.14.

The next lowest in the rate of increase in the list of southern States is Virginia, whose gain upon her aggregate population, in 1850, was 174,657, equal to 12.29 per cent. The white class gained 152,611, or 17.06 per cent., the slaves 18,337, or 3.88 per cent.

These are examples of the States wherein the population has advanced with slowest progress the past ten years. Turning now to the States which have made the most rapid advance, we find that New York has increased from 3,097,394 to 3,880,735, exhibiting an

augmentation of 783,341 inhabitants, being at the rate of 25.29 per cent. The free colored population has fallen off 64 since 1850, a diminution to be accounted for probably by the operation of the fugitive slave law, which induced many colored persons to migrate further north.

The gain of Pennsylvania has been in round numbers 595,000. In that State the free colored have increased about 3,000. The greater mildness of the climate and a milder type of the prejudices connected with this class of population, the result of benevolent influences and its proximity to the slaveholding States, may account for the fact that this race holds its own in Pennsylvania, while undergoing a diminution in the State next adjoining on the north.

Minnesota was chiefly unsettled territory at the date of the Seventh Census; its large present population, as shown by the returns, is therefore nearly clear gain.

The vast region of Texas ten years since was comparatively a wilderness. It has now a population of over 600,000, and the rate of its increase is given as 184 per cent.

Illinois presents the most wonderful example of great, continuous, and healthful increase. In 1830 Illinois contained 157,445 inhabitants; in 1840, 476,183; in 1850, 851,470; in 1860, 1,711,951. The gain during the last decade was, therefore, 860,481, or 101.06 per cent. So large a population, more than doubling itself in ten years, by the regular course of settlement and natural increase, is without a parallel. The condition to which Illinois has attained under the progress of the last thirty years is a monument of the blessings of industry, enterprise, peace, and free institutions.

The growth of Indiana in population, though less extraordinary than that of her neighboring State, has been most satisfactory, her gain during the decade having been 362,000, or more than thirty-six per cent. upon her number in 1850.

Michigan, Wisconsin, and Iowa have participated to the full extent in the surprising development of the northwest. The remarkable healthfulness of the climate of that region seems to more than compensate for its rigors, and the fertility of the new soil leads men eagerly to contend with and overcome the harshness of the elements. The energies thus called into action have, in a few years, made the States of the northwest the granary of Europe, and that section of our Union which, within the recollection of living men, was a wilderness is now the chief source of supply in seasons of scarcity for the suffering millions of another continent.

Looking cursorily over the returns, it appears that the fifteen slaveholding States contain 12,240,000 inhabitants, of whom 8,039,000 are whites, 251,000 free colored persons, and 3,950,000 are slaves. The actual gain of the whole population in those States from 1850 to 1860, was 2,627,000, equal to 27.33 per cent. The slaves advanced in numbers 749,931, or 23.44 per cent. This does not include the slaves of the District of Columbia, who decreased 502 in the course of the ten years. The nineteen free States and seven Territories, together with the federal District, contained, according to the Eighth Census, 19,201,546 persons, including 27,749 Indians; of whom 18,936,579 were white, and 237,218 free colored. The increase of both classes was 5,598,603, or 41.24 per cent. No more satisfactory indication of the advancing prosperity of the country could be desired than this general and remarkable progress in population. North and south we find instances of unprecedented gains, as in the case of Illinois, just adverted to. In the southwest the great State of Missouri has increased by the number of 500,000 inhabitants, which is within a fraction of 74 per cent. It is due to candor to state that the marked disproportion between the rate of gain in the north and south respectively, is manifestly to some extent caused by the larger number of immigrants who settle in the former section, on account of congeniality of climate, the variety of occupation, the dignity wherewith respectable employment is invested, and the freedom of labor.

Having thus briefly and imperfectly noticed the manner in which the general gain of population during the last ten years has been distributed among the States, we may with advantage examine the progress of the country as a whole, in this respect, from 1790 to 1860....

. . . [There has been] considerable uniformity in the rate of progression of the whole population. It has varied in the different decades from $32\frac{6}{10}$ per cent. increase to $36\frac{1}{2}$. The whites, constituting the great bulk of the inhabitants, have governed the ratio of augmentation for the mass. The lowest rate of increase shown for that class was by the census of 1830, namely, a fraction less than 34 per cent. In 1850 it has risen above 38 per cent., and continued to be about the same from 1850 to 1860. The number of free colored persons was small in 1790, and as a condition or class in society it holds about the same position as then. We possess very insufficient means for estimating the natural increase of this division of our population. Their aggregate number has been so continually affected by manumissions, by legislation changing their condition, and to a small extent by emigration, that from these causes, rather than by the ordinary progress

of increase, they have reached a total of nearly half a million, and the rate per cent. of their advancement in seventy years, has been equal to that of the whole population, and not very far below that of the whites; and that at the same time they have gained in a ratio nearly one-half greater than the slaves. . . .

[*Aggregate Population and Number of Inhabitants to the Square Mile*]

States	Area in square miles	1850.		1860.	
		Population	No. of inhabitants to square mile	Population	No. of inhabitants to square mile
New England States (6)	62,116	2,728,106	43.92	3,135,283	50.47
Middle States, including Maryland, Delaware, and Ohio (6)	151,760	8,553,713	56.36	10,597,661	69.83
Coast planting States, including South Carolina, Georgia, Florida, Alabama, Mississippi, and Louisiana (6)	286,077	3,557,872	12.43	4,364,927	15.25
Central slave States, Virginia, North Carolina, Tennessee, Kentucky, Missouri, and Arkansas (6)	309,210	5,167,276	16.71	6,471,887	20.93
Northwestern States, Indiana, Illinois, Michigan, Wisconsin, Iowa, Minnesota (6)	337,957	2,734,945	8.90	5,436,176	16.08
Texas	237,321	212,592	0.89	604,215	2.55
California	188,982	165,000	0.87	379,994	2.01

VII. Immigration

Extent and Character, 1820–1860 [1]

The immigration question was of considerable importance even before the Civil War. There can be no doubt that the immigrants affected American life, and they in turn were affected by American ideals and ideas. The extent and character of the immigration up to the year 1860 are given by the census authorities as follows:

One of the commissioners sent by the Continental Congress to Europe, Silas Deane, expressed the expectation that if the colonies established their independence, the immigration from the Old World

[1] *Preliminary Report on the Eighth Census, 1860* (Washington, 1862), 12–19.

would be prodigiously increased; and as a consequence, the cultivated lands would rise in value, and new lands would be brought into market. This anticipation has been strikingly and abundantly realized. And in connexion with the census of nativities, the records of immigration have a special importance as indicating the progressive augmentation of the immigrants who have sought to improve their fortunes in the New World.

From a survey of the irregular data previous to 1819, by Dr. Seybert, Prof. Tucker, and other statists, it appears that from 1790 to 1800, about 50,000 Europeans, or "aliens," arrived in this country; in the next ten years the foreign arrivals were about 70,000, and in the ten years following, 114,000, ending with 1820. To determine the actual settlers, a deduction of 14.5 per cent. from these numbers should probably be made for transient passengers, as hereafter described.

Louisiana was purchased from France in 1803. The portion of this territory south of the thirty-third parallel, according to the historian Hildreth, comprised a population of about 50,000, more than half of whom were slaves. With these should be counted about 10,000 in the settlements north of that parallel, augmented by a recent immigration, with a predominance of whites. The foreign population acquired with the whole Louisiana territory may thus be reckoned at 60,000; about one-half or 30,000 being whites of French, Spanish, and British extraction; and the other 30,000 being slaves and free colored. This number of whites should evidently be added to the current immigration by sea already mentioned, in order to obtain the foreign accession to the white population of the United States during that period.

Instead of scattered notices from shipping lists, the arrival of passengers has been officially recorded at the custom-houses, since 1819, by act of Congress. There are some deficiencies perhaps in the returns of the first ten or twelve years, but the subsequent reports are considered reliable. While the classified lists exhibit the whole number of foreign passengers, the great majority of whom are emigrants, they also furnish valuable information not otherwise obtainable respecting the statistical history of immigration.

The following numbers, registered under the act of 1819, are copied from the authentic summary of Bromwell, to which the numbers for the last five years have been added from the annual reports of the State Department, thus bringing the continuation down to the year of the present census.

Statement of the number of Alien passengers arriving in the United States by sea from foreign countries from September 30, 1819, to December 31, 1860.

Year	Males	Females	Sex not stated	Total
Year ending September 30, 1820	4,871	2,393	1,121	8,385
1821	4,651	1,636	2,840	9,127
1822	3,816	1,013	2,082	6,911
1823	3,598	848	1,908	6,354
1824	4,706	1,393	1,813	7,912
1825	6,917	2,959	323	10,199
1826	7,702	3,078	57	10,837
1827	11,803	5,939	1,133	18,875
1828	17,261	10,060	61	27,382
1829	11,303	5,112	6,105	22,520
1830	6,439	3,135	13,748	23,322
1831	14,909	7,724	.....	22,633
1832	34,596	18,583	.....	53,179
Quarter ending December 31, 1832	4,691	2,512	100	7,303
Year ending December 31, 1833	41,546	17,094	.....	58,640
1834	38,796	22,540	4,029	65,365
1835	28,196	17,027	151	45,374
1836	47,865	27,553	824	76,242
1837	48,837	27,653	2,850	79,340
1838	23,474	13,685	1,755	38,914
1839	42,932	25,125	12	68,069
1840	52,883	31,132	51	84,066
1841	48,082	32,031	176	80,289
1842	62,277	41,907	381	104,565
First three quarters of 1843	30,069	22,424	3	52,496
Year ending September 30, 1844	44,431	34,184	.....	78,615
1845	65,015	48,115	1,241	114,371
1846	87,777	65,742	897	154,416
1847	136,086	97,917	965	234,968
1848	133,906	92,149	472	226,527
1849	177,232	119,280	512	297,024
1850	196,331	112,635	1,038	310,004
Quarter ending December 31, 1850	32,990	26,805	181	59,976
Year ending December 31, 1851	217,181	162,219	66	379,466
1852	212,469	157,696	1,438	371,603
1853	207,958	160,615	72	368,645
1854	256,177	171,656	.....	427,833
1855	115,307	85,567	3	200,877
1856	115,846	84,590	.....	200,436
1857	146,215	105,091	.....	251,306
1858	72,824	50,002	300	123,126
1859	69,161	51,640	481	121,282
1860	88,477	65,077	86	153,640
Total	2,977,603	2,035,536	49,275	5,062,414

The following aggregates also exhibit the number of arrivals of passengers from foreign countries during periods of nearly ten years each, and thus indicate the accelerated progress of immigration:

Periods	Passengers of Foreign birth	American and Foreign
In the 10 years ending September 30, 1829.....	128,502	151,636
In the $10\frac{1}{4}$ years ending December 31, 1839.....	538,381	572,716
In the $9\frac{3}{4}$ years ending September 30, 1849.....	1,427,337	1,479,478
In the $11\frac{1}{4}$ years ending December 31, 1860.....	2,968,194	3,255,591
In the $41\frac{1}{4}$ years ending December 31, 1860.....	5,062,414	5,459,421

Adjusting the returns to the periods of the decennial census, by the aid of the quarterly reports, we find very nearly the following numbers:

Three census periods	Passengers of Foreign birth
In the 10 years previous to June 1, 1840.....	552,000
Do.....do.....1850.....	1,558,300
Do.....do.....1860.....	2,707,624

To arrive at the true immigration, these numbers should be largely increased for those who have come by way of Canada. On the other hand, they should be diminished for return emigrants, and for the merchants, factors, and visitors who go and come repeatedly, and are thus enumerated twice or more in the returns.

For an example of the former class, according to British registry, 17,798 emigrants returned from the United States to Great Britain in the year 1860. How numerous has been the latter class who have been counted twice or more, is not definitely known; to make note of these would constitute a desirable improvement in the future official reports.

The preceding summaries embrace passengers of foreign birth, together with 397,007 native born Americans, who were also registered as arriving from foreign ports. In the record of ages following, both classes are united; but since the foreigners are far more numerous, the result will exhibit very nearly the relative number at each

age of the foreign passengers. A careful reduction of the whole number whose ages were specified, has just been completed in connexion with the census, as follows:

Distribution of Ages on arrival.

Ages	Number of ages stated from 1820 to 1860			Proportions		
	Males	Females	Total	Males	Females	Total
Under 5.....	218,417	200,676	419,093	4.143	3.806	7.949
5 and under 10	199,704	180,606	380,310	3.788	3.425	7.213
10 and under 15	194,580	166,833	361,413	3.691	3.164	6.855
15 and under 20	404,338	349,755	754,093	7.669	6.633	14.302
20 and under 25	669,853	428,974	1,098,827	12.706	8.136	20.842
25 and under 30	576,822	269,554	846,376	10.940	5.112	16.052
30 and under 35	352,619	163,778	516,397	6.688	3.106	9.794
35 and under 40	239,468	114,165	353,633	4.542	2.165	6.707
40 and upwards.	342,022	200,322	542,344	6.487	3.799	10.286
Total.....	3,197,823	2,074,663	5,272,486	60.654	39.346	100.000

From the foregoing table it will be seen that the distribution is materially different from that of a settled population; the females are less than the males in the ratio of two to three; almost precisely one-half of the total passengers are between fifteen and thirty years of age. It will further be noted that the sexes approach nearest to equality in children and the youthful ages, as would naturally be expected in the migration of families; while from twenty-five years of age to forty the male passengers are double the number of females. . . .

The passengers from foreign ports arrive at all seasons of the year; the greatest number, however, make the passage in the second and third quarters, or in the summer months, and a smaller number in the winter months.

The deaths on the voyage during the last five years have been only about one-sixth of one per cent.; the time of passage being generally some thirty days. . . .

From the first of the two following tables it will be seen that the most numerous class among the passengers is that of *laborers;* the next in order are *farmers*, mechanics, and merchants. The "seamstresses and milliners," and nearly all of the "servants," are females; the other female passengers, with few exceptions, have been entered

under the category of "not stated," and comprise about five-sevenths of that division.

It will be proper to mention that the ten trades and professions marked with a star in the table were always enumerated during the whole period. The other occupations were not reported during the four years 1856–'59, except that their aggregate only was embraced under the single title of "other occupations." But the omission could be roughly supplied by assuming the number in each trade during the four years to be the same fraction of the yearly passengers as it was in the other six years.

In 1856–'59, the deaths on the passage also were omitted in the official total of passengers, though retained in all previous years and in 1860; for the sake of uniformity this temporary omission of deaths is restored in the present collection of tables, which have been verified throughout with the greatest care.

The next following table, stating the birthplace or "country where born," will form a valuable supplement to the decennial census of nativities. Excepting the first numeric column, which commenced with small numbers October 1, 1819, the remaining columns correspond as nearly with the census periods as the official yearly reports allow without interpolation.

The total number arriving from the United Kingdom of Great Britain and Ireland on our shores is thus stated to be 2,750,874. But a recent statement from British official sources gives the number emigrating to the United States in the forty-six years, 1815–'60, as 3,048,206. The difference of the two returns will be explained partly by those who emigrated in the interval, 1815–19, before our registry commenced, being about 55,000; and chiefly by the more numerous class who entered the United States by way of Canada, and so were not included in our custom-house returns.

In the same period of forty-six years it is also stated that 1,196,521 persons emigrated from the United Kingdom to the British colonies in North America. A large portion of these are known to have eventually settled in the United States. Thus it appears safe to assume that since the close of the last war with that country, in 1814, about three and a quarter millions of the natives of Great Britain and Ireland, "a population for a kingdom," have emigrated to this country.

Next in magnitude is the migration from Germany, amounting to 1,486,044 by our custom-house returns; the next is that from France, 208,063; and from the other countries, as shown in the table. A large share of the German emigrants have embarked from the port

of Havre; others from Bremen, Hamburg, Antwerp; many have also crossed over and taken passage from British ports.

As our own people, following "the star of empire," have migrated to the west in vast numbers, their places have been supplied by Europeans, which has modified the character of the population, yet the great mass of the immigrants are found to cherish true patriotism for the land of their adoption.

Occupation of passengers arriving in the United States from foreign countries during the forty-one years ending with 1860

Occupation	1820 to 1830	1831 to 1840	1841 to 1850	1851 to 1860	1820 to 1860
*Merchants	19,434	41,881	46,388	124,149	231,852
*Farmers	15,005	88,240	256,880	404,712	764,837
*Mechanics	6,805	56,582	164,411	179,726	407,524
*Mariners	4,995	8,004	6,398	10,087	29,484
*Miners	341	368	1,735	37,523	39,967
*Laborers	10,280	53,169	281,229	527,639	872,317
Shoemakers	1,109	1,966	63	336	3,474
Tailors	983	2,252	65	334	3,634
Seamstresses and milliners	413	1,672	2,096	1,065	5,246
Actors	183	87	233	85	588
Weavers and spinners	2,937	6,600	1,303	717	11,557
*Clergymen	415	932	1,559	1,420	4,326
Clerks	882	1,143	1,065	792	3,882
*Lawyers	244	461	831	1,140	2,676
*Physicians	805	1,959	2,116	2,229	7,109
Engineers	226	311	654	825	2,016
Artists	139	513	1,223	615	2,490
Teachers	275	267	832	154	1,528
Musicians	140	165	236	188	729
Printers	179	472	14	40	705
Painters	232	369	8	38	647
Masons	793	1,435	24	58	2,310
Hatters	137	114	1	4	256
Manufacturers	175	107	1,833	1,005	3,120
Millers	199	189	33	210	631
Butchers	329	432	76	108	945
Bakers	583	569	28	92	1,272
*Servants	1,327	2,571	24,538	21,058	49,494
Other occupations	5,466	4,004	2,892	13,844	26,206
Not stated	101,442	363,252	969,411	1,544,494	2,978,599
Total	176,473	640,086	1,768,175	2,874,687	5,459,421

Country where born

Countries	1820 to 1830	1831 to 1840	1841 to 1850	1851 to 1860	1820 to 1860
England	15,837	7,611	32,092	247,125	302,665
Ireland	27,106	29,188	162,332	748,740	967,366
Scotland	3,180	2,667	3,712	38,331	47,890
Wales	170	185	1,261	6,319	7,935
Great Britain and Ireland	35,534	243,540	848,366	297,578	1,425,018
Total United Kingdom	81,827	283,191	1,047,763	1,338,093	2,750,874
France	8,868	45,575	77,262	76,358	208,063
Spain	2,616	2,125	2,209	9,298	16,248
Portugal	180	829	550	1,055	2,614
Belgium	28	22	5,974	4,738	9,862
Prussia	146	4,250	12,149	43,887	60,432
Germany	7,583	148,204	422,477	907,780	1,486,044
Holland	1,127	1,412	8,251	10,789	21,579
Denmark	189	1,063	539	3,749	5,540
Norway and Sweden	94	1,201	13,903	20,931	36,129
Poland	21	369	105	1,164	1,659
Russia	89	277	551	457	1,374
Turkey	21	7	59	83	170
Switzerland	3,257	4,821	4,644	25,011	37,733
Italy	389	2,211	1,590	7,012	11,202
Greece	20	49	16	31	116
Sicily	17	35	79	429	560
Sardinia	32	7	201	1,790	2,030
Corsica	2	5	2	.....	9
Malta	1	35	78	5	119
Iceland	.....	.....	.....	10	10
Europe	2	.....	51	473	526
British America	2,486	13,624	41,723	59,309	117,142
South America	542	856	3,579	1,224	6,201
Central America	107	44	368	449	968
Mexico	4,818	6,599	3,271	3,078	17,766
West Indies	3,998	12,301	13,528	10,660	40,487
China	3	8	35	41,397	41,443
East Indies	9	39	36	43	127
Persia	.....	.....	7	15	22
Asia	3	1	4	19	27
Liberia	1	8	5	5	19
Egypt	.....	4	.....	.....	4
Morocco	.....	4	1	.....	5
Algiers	.....	.....	2	.....	2

Country where born — Continued

Countries	1820 to 1830	1831 to 1840	1841 to 1850	1851 to 1860	1820 to 1860
Barbary States	4	.....	.....	.....	4
Cape of Good Hope	2	.....	.....	.....	2
Africa	10	36	47	186	279
Azores	13	29	327	2,873	3,242
Canary Islands	271	6	1	8	286
Madeira Islands	70	52	3	189	314
Cape Verd Islands	4	15	3	7	29
Sandwich Islands	1	6	28	44	79
Society Islands	.....	.....	1	6	7
Australia	2	3	.....	104	109
St. Helena	.....	1	3	13	17
Isle of France	.....	2	1	.....	3
South Sea Islands	79	.....	.....	.....	79
New Zealand	.....	.....	.....	4	4
Not stated	32,892	69,799	52,725	25,438	180,854
Total Aliens	151,824	599,125	1,713,251	2,598,214	5,062,414
United States	24,649	40,961	54,924	276,473	397,007
Total	176,473	640,086	1,768,175	2,874,687	5,459,421

CHAPTER XVII

SLAVERY AND THE SOUTH, 1823–1860

I. The Economics of Slave Labor

A. *A Philosophic View of Slave Labor, 1860*[1]

Slavery discussions just before the Civil War centered largely around the question of the advantages and disadvantages of slave labor. Those friendly to the system contended that the employment of negro slaves in the south was not only necessary but also desirable. Opponents of the system could not deny that the nature of the southern crops demanded a large supply of permanent, unskilled, hand labor, and that the negro slave possessed those characteristics, but they claimed that the same economic ends could be attained under free competition, among both whites and blacks. Some writers on the question attempted to be fair in their examinations, but even they oftentimes appear to be trying to prove points rather than to discover facts. The large majority, however, was biased, either for or against slavery, and each one selected arguments to suit his particular needs. Of those who attempted to examine the economics of slavery from a purely impersonal viewpoint, the English economist, J. E. Cairnes, was perhaps the best known. His views were as follows:

A circumstance more influential in determining the history of slavery in America than either origin or climate is pointed at by Tocqueville in his remark, that the soil of New England "was entirely opposed to a territorial aristocracy." "To bring that refractory land into cultivation, the constant and interested exertions of the owner himself were necessary; and, when the ground was prepared, its produce was found to be insufficient to enrich a master and a farmer at the same time. The land was then naturally broken up into small portions which the proprietor cultivated for himself." Such a country, for reasons which will presently be more fully indicated, was entirely unsuited to cultivation by slave labour; but what I wish here to remark is, that this fact, important as it is with reference to our subject, is yet insufficient in itself to afford the solution which we seek; for, though it would account for the disappearance of slavery from the New England States, it fails entirely when applied to the country

[1] *The Slave Power.* By J. E. Cairnes (London and Cambridge, 1863), 42–52.

west and south of the Hudson, which is for the most part exceedingly fertile, but in which, nevertheless, slavery, though extensively introduced, has not been able to maintain itself. To understand, therefore, the conditions on which the success of a slave *régime* depends, we must advert to other considerations than any which have yet been adduced.

The true causes of the phenomenon will appear, if we reflect on the characteristic advantages and disadvantages which attach respectively to slavery and free labour, as productive instruments, in connexion with the external conditions under which these forms of industry came into competition in North America.

The economic advantages of slavery are easily stated: they are all comprised in the fact that the employer of slaves has absolute power over his workmen, and enjoys the disposal of the whole fruit of their labours. Slave labour, therefore, admits of the most complete organization, that is to say, it may be combined on an extensive scale, and directed by a controlling mind to a single end, and its cost can never rise above that which is necessary to maintain the slave in health and strength.

On the other hand, the economical defects of slave labour are very serious. They may be summed up under the three following heads: — it is given reluctantly; it is unskilful; it is wanting in versatility.

It is given reluctantly, and consequently the industry of the slave can only be depended on so long as he is watched. The moment the master's eye is withdrawn, the slave relaxes his efforts. The cost of slave labour will therefore, in great measure, depend on the degree in which the work to be performed admits of the workmen being employed in close proximity to each other. If the work be such that a large gang can be employed with efficiency within a small space, and be thus brought under the eye of a single overseer, the expense of superintendence will be slight; if, on the other hand, the nature of the work requires that the workmen should be dispersed over an extended area, the number of overseers, and therefore, the cost of the labour which requires this supervision, will be proportionately increased. The cost of slave labour thus varies directly with the degree in which the work to be done requires dispersion of the labourers, and inversely as it admits of their concentration. Further, the work being performed reluctantly, fear is substituted for hope, as the stimulus to exertion. But fear is ill calculated to draw from a labourer all the industry of which he is capable. "Fear," says Bentham, "leads the labourer to hide his powers, rather than to show them;

to remain below, rather than to surpass himself. . . . By displaying superior capacity, the slave would only raise the measure of his ordinary duties; by a work of supererogation he would only prepare punishment for himself." He therefore seeks, by concealing his powers, to reduce to the lowest the standard of requisition. "His ambition is the reverse of that of the free man; he seeks to descend in the scale of industry, rather than to ascend."

Secondly, slave labour is unskilful, and this, not only because the slave, having no interest in his work, has no inducement to exert his higher faculties, but because, from the ignorance to which he is of necessity condemned, he is incapable of doing so. In the Slave States of North America, the education of slaves, even in the most rudimentary form, is proscribed by law, and consequently their intelligence is kept uniformly and constantly at the very lowest point. "You can make a nigger work," said an interlocutor in one of Mr. Olmsted's dialogues, "but you cannot make him think." He is therefore unsuited for all branches of industry which require the slightest care, forethought, or dexterity. He cannot be made to co-operate with machinery; he can only be trusted with the coarsest implements; he is incapable of all but the rudest forms of labour.

But further, slave labour is eminently defective in point of versatility. The difficulty of teaching the slave anything is so great, that the only chance of turning his labour to profit is, when he has once learned a lesson, to keep him to that lesson for life. Where slaves, therefore, are employed there can be no variety of production. If tobacco be cultivated, tobacco becomes the sole staple, and tobacco is produced, whatever be the state of the market, and whatever be the condition of the soil. This peculiarity of slave labour, as we shall see, involves some very important consequences.

Such being the character of slave-labour, as an industrial instrument, let us now consider the qualities of the agency with which, in the colonization of North America, it was brought into competition. This was the labour of peasant proprietors, a productive instrument, in its merits and defects, the exact reverse of that with which it was called upon to compete. Thus, the great and almost the sole excellence of slave labour is, as we have seen, its capacity for organization; and this is precisely the circumstance with respect to which the labour of peasant proprietors is especially defective. In a community of peasant proprietors, each workman labours on his own account, without much reference to what his fellow-workmen are doing. There is no commanding mind to whose guidance the whole labour force

will yield obedience, and under whose control it may be directed by skilful combinations to the result which is desired. Nor does this system afford room for classification and economical distribution of a labour force in the same degree as the system of slavery. Under the latter, for example, occupation may be found for a whole family of slaves, according to the capacity of each member, in performing the different operations connected with certain branches of industry. Thus, in the culture of tobacco, the women and children may be employed in picking the worms off the plants, or gathering the leaves as they become ripe, while the men are engaged in the more laborious tasks. But it is otherwise when the cultivator is a small proprietor. His children are at school, and his wife finds enough to occupy her in her domestic duties: he can, therefore, command for all operations, however important or however insignificant, no other labour than his own, or that of his grown-up sons — labour which would be greatly misapplied in performing such manual operations as I have described. His team of horses might be standing idle in the stable, while he was gathering tobacco leaves or picking worms, an arrangement which would render his work exceedingly costly. The system of peasant proprietorship, therefore, does not admit of combination and classification of labour in the same degree as that of slavery. But if in this respect it lies under a disadvantage as compared with its rival, in every other respect it enjoys an immense superiority. The peasant proprietor, appropriating the whole produce of his toil, needs no other stimulus to exertion. Superintendence is here completely dispensed with. The labourer is under the strongest conceivable inducement to put forth, in the furtherance of his task, the full powers of his mind and body; and his mind, instead of being purposely stinted and stupefied, is enlightened by education, and aroused by the prospect of reward.

Such are the two productive agencies which came into competition on the soil of North America. If we now turn to the external conditions under which the competition took place, we shall, I think, have no difficulty in understanding the success of each respectively in that portion of the Continent in which it did in fact succeed.

The line dividing the Slave from the Free States marks also an important division in the agricultural capabilities of North America. North of this line, the products for which the soil and climate are best adapted are cereal crops, while south of it the prevailing crops are tobacco, rice, cotton, and sugar; and these two classes of crops are broadly distinguished in the methods of culture suitable to each.

The cultivation of the one class, of which cotton may be taken as the type, requires for its efficient conduct that labour should be combined and organized on an extensive scale. On the other hand, for the raising of cereal crops this condition is not so essential. Even where labour is abundant and that labour free, the large capitalist does not in this mode of farming appear on the whole to have any preponderating advantage over the small proprietor, who, with his family, cultivates his own farm, as the example of the best cultivated states in Europe proves. Whatever superiority he may have in the power of combining and directing labour seems to be compensated by the greater energy and spirit which the sense of property gives to the exertions of the small proprietor. But there is another essential circumstance in which these two classes of crops differ. A single labourer, Mr. Russell tells us, can cultivate twenty acres of wheat or Indian corn, while he cannot manage more than two of tobacco, or three of cotton. It appears from this that tobacco and cotton fulfil that condition which we saw was essential to the economical employment of slaves — the possibility of working large numbers within a limited space; while wheat and Indian corn, in the cultivation of which the labourers are dispersed over a wide surface, fail in this respect. We thus find that cotton, and the class of crops of which cotton may be taken as the type, favour the employment of slaves in the competition with peasant proprietors in two leading ways: first, they need extensive combination and organization of labour — requirements which slavery is eminently calculated to supply, but in respect to which the labour of peasant proprietors is defective; and secondly, they allow of labour being concentrated, and thus minimize the cardinal evil of slave labour — the reluctance with which it is yielded. On the other hand, the cultivation of cereal crops, in which extensive combination of labour is not important, and in which the operations of industry are widely diffused, offers none of these advantages for the employment of slaves, while it is remarkably fitted to bring out in the highest degree the especial excellencies of the industry of free proprietors. Owing to these causes it has happened that slavery has been maintained in the Southern States, which favour the growth of tobacco, cotton, and analogous products, while, in the Northern States, of which cereal crops are the great staple, it from an early period declined and has ultimately died out. And, in confirmation of this view, it may be added that wherever in the Southern States the external conditions are especially favourable to cereal crops, as in parts of Virginia, Kentucky, and

Missouri, and along the slopes of the Alleghanies, there slavery has always failed to maintain itself. It is owing to this cause that there now exists in some parts of the South a considerable element of free labouring population.

These considerations appear to explain the permanence of slavery in one division of North America, and its disappearance from the other; but there are other conditions essential to the economic success of the institution besides those which have been brought into view in the above comparison, to which it is necessary to advert in order to a right understanding of its true basis. These are high fertility of the soil, and a practically unlimited extent of it.

The necessity of these conditions to slavery will be apparent by reflecting on the unskilfulness and want of versatility in slave labour to which we have already referred.

B. *Cheapness of Slave Labor, 1852* [1]

The friends of the system argued that slave labor was not only more permanent than free labor, but also that it was cheaper. The following is typical of the more moderate claims of the time for the cheapness of slave labor:

Probably, however, the greatest advantage we have over the Indian producers is in the cheapness of our labor. It is true that wages are very low in India, but the labor is also inefficient. We have the cheapest and most efficient labor in the world.

The African slave in the southern states is well fed with good and substantial food, that gives him strength, endurance, and health. He is well clad in winter, and well lodged, to protect him from the inclemencies of the season. He is cheerful, able to work, and he works faithfully. As the whole cost of this labor to the state is made up of the simplest necessaries of life, the support of the young, and the old, and the feeble, it is evident that the south has the cheapest labor that is possible. It was the doctrine of Malthus, that in every country there is a constant tendency to reduce the wages of labor down to the mere support of the laborer. That limit, however approximated to elsewhere, has never been reached but in the south.

The slave is supplied with all he wants of meal, and with as much meat as is needed for his health and strength. This meal is prepared in many ways, and makes a most palatable bread. His master generally feeds on it in preference to flour. He has a garden, where

[1] *Eighty Years' Progress.* By Professor C. F. McCay, of Columbia, South Carolina (Hartford, 1869), 119–21.

he can raise potatoes, cabbages, collards, greens, turnips, beans, and such other vegetables as the taste and industry of the family may desire. He has clothing — cheap, it is true, but warm and substantial.

There is a separate dwelling for each family, and an unlimited supply of fuel for the winter. The old, who are unable to labor in the field, find some slight work about the house — the men in the garden, the women in the care of young children whose mothers are out on the usual plantation work. . . .

Another element of the cheapness of this labor is that nothing is wasted in vicious indulgences. In other countries, a large part of the wages of labor is expended in strong drink; but the most stringent laws are everywhere passed against selling spirits to slaves; the Maine liquor law is enforced with the most severe penalties, and with the utmost certainty of conviction for the guilty.

Much time is lost in free countries in holidays and shows; in idleness and neglect of work; in seeking employment; in change from one place to another; but all this is saved in the south, for there are no idle hands about the plantation, and, excepting the week between Christmas and New Year's day, when there is a general holiday, there is no lost time, except from sickness, in any part of the year.

The children are all put at work at eleven or twelve years of age, as soon as they are able to guide a plough or pick cotton in the fields. The women and men are both efficient workers, and the division of labor is so complete that the children of many mothers are watched over and cared for by one, and the cooking for many families attended to by a single cook.

This system of labor is thus the cheapest possible. The corn and the meat being, in most cases, raised on the plantation, and not burdened with the cost of transportation, are supplied at the cheapest prices; the work is all light and easy, so that women and boys, as well as men, can engage in it efficiently. Every thing is arranged so that labor is secured at the lowest possible rate. . . .

The culture of cotton is specially suited for slave labor, because of its giving full employment for the whole year. January is devoted to fitting up the fences, clearing off the decayed trees that have fallen in the fields, and putting in order the cultivators and all the implements of the farm. The ploughs are also started, and some of the ground broken up for spring planting. February is the main time for ploughing, and in the more southern part of the cotton country, corn is planted in this month. In latitude 31° the time for corn is the 20th of February; above this line it gradually becomes later.

About a month after the corn, cotton is planted. In every locality it is desired to have the cotton up as soon as the fear of frost is gone. The season for planting begins as early as the 15th of March in the most southern latitudes, is delayed to the 1st of April at the parallel of 32°, to the 15th in latitude 34°, and later still above this line. As the seed are planted close together in drills, the hands pass along the rows and chop down the weakest and smallest plants, leaving them in bunches, fifteen to twenty inches apart. The ploughs follow or precede the hoes, both being necessary to kill the grass and soften the ground about the plants. The hoes follow again, and thin out the bunches to one or two stalks, and finally they are reduced to one, the rest having perished from the cutworm or insects, or the blows of the plough and the hoe. For two or three months this hoeing and ploughing, to soften the ground and destroy the grass, gives full employment to the hands. The corn has also to be treated in the same way, and the work is continued on both until the summer has come and the fruit begins to appear on the cotton. There is a little leisure now to the hands before the picking is begun, and this gives time to harvest the wheat that has been sown; to cut the oats, and gather the fodder from the corn. This work fills up the time until the picking begins. At first, but few of the pods are open. The hands pass between the rows — which are from three to four feet wide on the poor lands, and from six to seven on the richest — and as the branches stretch out so as to reach each other, they each gather from two rows as they pass through the field. By September the fields are white with the opening cotton, and every hand, young and old, male and female, that can be of any service, is busied in gathering the cotton, lest the rain should come and beat it out, and scatter it on the ground. In October this picking continues undiminished. At the close of this month, frost usually appears, and stops the growth of the plant and kills the leaves, but the pods keep opening, and new cotton offering itself to the hands until December. The fields are picked over twice or three times if the season is favorable and the crop large, and five or six times if the opening cotton does not hurry the planter. The gathered cotton has now to be sunned, and dried, and ginned, and packed, and delivered at the nearest railway station or river landing, or sold in the neighboring town. Thus is the year completed with unremitting toil, from Christmas to Christmas.

The distribution of labor between the white and black races, so that the former shall have the selection of the products and of the place of labor, of the seeds and the mode of cultivation, and of

all the plans and management of the plantation, is another great aid to the cheapness and the efficiency of the labor.

Some political economists have supposed that free is cheaper than slave labor; but though there are pursuits where the watchfulness, foresight, intelligence, and energy of a free man will make his labor so much more productive than that of a slave as to pay the superior cost of his support, it is certain that the want of these qualities in the slave is but a slight drawback to the value of his labor in the production of cotton. The work is so regular, and simple, and easy, that the free man performs it no better than the slave, and as the direction, and management, and skill are in the master, the work is well directed, and wisely managed. The slave works enough, though he does not work as hard as some free men. In fact, it is very doubtful if a free white man, impelled by necessity or the desire of accumulation, would be more efficient in the cotton field than the slave. Certain it is that in the south, where the hot sun breeds disease, and the malarious air brings fevers, the white freeman could not produce as much as the slave, much less could he labor as cheaply. His expenditures being more, his wife and children not working at all, or but little, his waste of time and money in vicious practices and holidays, would require larger wages, and for these he has nothing more to give than the slave.

C. *Radical View on the Efficiency of Slavery, 1860* [1]

Of all the arguments advanced in support of the contention that slavery was efficient and economical, none was more radical than that advanced by Mr. Wolfe, of Virginia, in his reply to the arguments made in Helper's *Impending Crisis*. The following extract is illustrative of the more extreme view on the subject:

We will now consider some of the statistical fallacies of Helper's book. Not only does this incendiary work abound with incentives to treason, massacre, and bloody revolution, but the statistics are fallacious, and evidently prepared for the purpose of deceiving the ignorant and fanatical portion of the community. The attentive and intelligent reader, who will take the trouble of examining them closely, will easily detect their fallacy. By way of showing the superior productiveness of the free States over the slave States, he compares the value of their respective cereals, and gives at page 22 of the Compendium the following results:

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[1] *Helper's Impending Crisis Dissected*. By Saml. M. Wolfe (Philadelphia, 1860), 38–45.

CEREALS

Free States	$351,709,703
Slave States	306,927,067
In favor of the free States	$ 44,782,636

At page 37 the value of the other agricultural products of the North and South are compared as follows:

OTHER AGRICULTURAL PRODUCTS

Free States	$214,422,523
Slave States	155,223,415
In favor of the free States	$ 59,199,108

The aggregate difference between all the agricultural products of the South and North thus appear to be:

TOTAL PRODUCTS

Free States	$566,132,226
Slave States	462,150,482
In favor of the free States	$103,981,744

Now, the fallacy of this deduction will be made clear by turning to a table at page 71 of the Compendium, in which the population of the free and slave States is compared:

Northern population	13,434,922
Southern population	9,612,979

It will be thus seen that the Northern population is one and a half that of the Southern, and yet it does not produce one-fifth more. According to the foregoing figures the North ought to yield, in order to make its productions equal to the South, $645,682,722, as any schoolboy can calculate by the rule of simple proportion thus:

Southern Population		*Northern Population*				*Answer*
9,612,979	:	13,434,922	::	$462,150,482	:	$645,684,722

The true state of the case, therefore, is:

What they ought to produce	$645,685,722
What the free States do produce	566,132,226
Against the free States and in favor of slave	$ 79,553,496

Again, if we take the proportion of population to the square mile, the figures will be still more in favor of the South. According to one of the tables quoted in Helper's Compendium, (at page 71,) the population of the South is only 11.29 the square mile, whereas the population of the North is 21.91. By the rule of proportion, the result on this basis ought to be:

Pop. Sq. M.		*Pop. Sq. M.*				*Answer*
11.29	:	21.91	: :	$462,150,482	:	$898,469,181

Now let us subtract what the North actually produces from what it ought to produce on this basis, as follows:

What it ought to produce	$898,469,182
What it actually produced	566,132,226
Against the free States	$332,336,956

It will be thus seen, according to Helper's own figures, that there is a balance of $332,336,956 against the free States, and in favor of the slave, instead of $103,981,744 to the credit of the Northern States, as the dishonest writer pretends. If we add these two amounts together, the result will show that he lies for abolition to the trifling sum of $436,318,700 — four hundred and thirty-six millions, three hundred and eighteen thousand, seven hundred dollars?

Such is a specimen of his statistics, on which as little reliance is to be placed as on his other facts and arguments against the South. The book is a tissue of falsehoods worthy of the bad cause for which it is written, and its endorsement is a disgrace to all who have given it the sanction of their names.

The ingenuity of man never devised a more effectual or plausible mode of deceiving and misleading the human understanding, than a shrewd arrangement of figures. By this device, Helper has, by an assumed fairness in forming statistical tables, been able to render his book plausible to many persons who are too apt, in most matters, to take whatever is presented to their understanding in the shape of figures, as so; — believing it to be a work of too much labor for figures to lie.

The analysis, however, of Helper's figures, shows a studied and wanton misrepresentation of important facts. In one table he arranges the respective products of the North and South, and very clearly, as he asserts, shows that white labor is much more productive than slave labor. It is due to the superior ingenuity and skill of the white man over the dull and torpid African to admit that fact; but

we deny that Helper has honestly shown it; upon the contrary we show that, by a fair comparison of the number of inhabitants to the square mile, the South produces *much more than the North.* . . .

The exportable products of the fifteen Slave States amount annually to $270,000,000 exclusive of gold and foreign merchandise re-exported; and their annual demand for the productions of other countries is about $225,000,000. There are 80,000 cotton plantations in the South, and the aggregate value of their annual products is $128,000,000. There are 16,000 tobacco plantations, and their annual products amount to $15,000,000. There are 2,600 sugar plantations, the products of which average annually $13,000,000. There are 700 rice plantations, which yield annually a revenue of $6,000,000. Bread-stuffs and provisions yield $78,000,000; the products of the forest amount to $10,700,000; manufactures yield $31,000,000; and the products of the sea yield $3,356,000; exclusive of $30,000,000 we send to the North!

These facts and figures rest mostly upon the authority of the *Southern Cultivator*, *De Bow's Review*, and the speeches in Congress of Senator Hammond, and Hon. L. M. Keitt, M. C. of South Carolina. But we are happy to find them sustained by the Secretary of the Treasury, in a late Report; and laid before Congress by "His Excellency President Buchanan," and by him endorsed.

The Secretary of the Treasury, in a late Report, sets down the exportation of domestic produce, exclusive of specie, at $266,438, 051. Of this amount, cotton, which is exclusively from the South, furnishes $128,382,351; tobacco gives $12,221,843, and rice yields $2,390,233,—both of which, also, are *exclusively* Southern; breadstuffs and provisions are estimated at $77,686,455; products of the forests at $10,-694,184; of manufactures at $30,970,992; of the sea at $3,356,797. Now take $128,382,351 for the value of cotton, and $12,221,843 for tobacco, and $2,390,233 for rice, which are exclusively Southern staples, and we have the sum of $142,994,427, which the South contributes to the exportations of the country, in these staple products, which, in the Union, are only raised within her limits. But her contribution does not stop here. Of the $77,686,455 furnished by breadstuffs and provisions, she contributed at least $25,000,000; of the products of the forest, in the shape of lumber, etc., she contributed about $5,000,000, or *one-half* of the exportation. Then $30,000,000, added to the $142,994,427, which we have already shown was furnished by cotton, tobacco and rice, make up $172,994,427, out of the $266,438,051, to which the whole domestic exportation amounts.

This would leave $93,443,051 for the domestic exportation from all the free States. But this is more than they are entitled to. Of the $30,970,992 contributed by domestic manufactures, at least $10,000,000 is the value of the raw material not grown at the North. This leaves only $83,442,624 as the contribution of the free States, against $172,994,427, as the contribution of the Southern or slave States, to the domestic exportation of the country.

D. *Cheapness of Free Labor, 1823*[1]

Perhaps a majority of those who argued on the efficiency and cheapness of slave and free labor favored the latter system. The friends of free labor pointed out the inherent tendency of man to shirk labor when he had no direct concern in its product, and naturally they concluded that the slave would work no more than was absolutely necessary, and that as a result his output would be less, relative to his cost, than the output of a free laborer. In some cases friends of free labor even contended that free men could be induced to labor for less wages than slaves.

If slave labour were cheaper than free labour, we should naturally expect that, in a state where slavery was allowed, land, *ceteris paribus*, would be most valuable in the districts where that system prevailed; and that in two adjoining states, in the one of which slavery was allowed, and in the other prohibited, land would be least valuable in the latter; but the contrary is notoriously the fact. In a late communication from America on this subject, from an intelligent observer, it is remarked: "The system of slave cultivation, as practised in the United States of America, has likewise a most destructive effect on the soil of our country. The state of Maryland, though a slave state, has comparatively but few slaves in the upper or western part of it; the land in this upper district is generally more broken by hills and stones, and is not so fertile as that on the southern and eastern parts. The latter has also the advantage of being situated upon the navigable rivers that flow into the Chesapeake Bay, and its produce can be conveyed to market at one-third of the average expense of that from the upper parts of the state; yet, with all these advantages of soil, situation, and climate, the land within the slave district will not, upon a general average, sell for half as much per acre as that in the upper districts, which is cultivated principally by free men. This fact may be also further and more strikingly illustrated by the comparative value of land within the states of Virginia and Pennsylvania, the one lying on the south, and the other on the north side of Maryland;

[1] *A Letter to M. Jean-Baptiste Say, on the Comparative Expense of Free and Slave Labour.* By Adam Hodgson (Liverpool, 1823), 13–17, 29–30.

the one a slave, the other a free state. In Virginia, land of the same natural soil and local advantages, will not sell for one-third as high a price as the same description of land will command in Pennsylvania. This single, plain, incontrovertible fact speaks volumes upon the relative value of slave and free labor, and it is presumed renders any further illustration unnecessary."

If slave labour were cheaper than free labour, we might fairly infer that, in a state in which slavery was allowed, free labour would be reduced by competition to a level with the labour of slaves, and not slave labour to a level with the labour of freemen; and that in two adjoining states, in the one of which slavery was allowed, and in the other prohibited, labour would be highest, *ceteris paribus*, in that in which slavery was proscribed. But experience proves the reverse. . . . When in Norfolk, Virginia, in the winter of 1820, I was told, that many slaves gave their masters two dollars, or nine shillings per week, for permission to work for themselves, and retain the surplus. I also found, that the common wages of slaves who are hired, were 20s. 3d. per week and their food, at the very time when flour was 4 dollars, or 18s., per barrel of 196 lbs., and beef and mutton 3d. to 4d. per lb. Five days afterward, in travelling through the rich agricultural districts of the free state of Pennsylvania, I found able bodied white men willing to work for their food only. This, indeed, was in the winter months, and during a period of extraordinary pressure.

I was told, however, that the average agricultural wages in this free state, were 5 or 6 dollars per month, and food; while, in Norfolk, at the time I allude to, they were 18 dollars per month, and food. If it should be replied, that in the town of Norfolk wages were likely to be much higher than in the country, I would ask, why they are not so in the principal towns of Russia?

If slave labour were cheaper than free labour, we should naturally expect to find it employed in the cultivation of those articles in which extended competition had reduced profits to the lowest point. On the contrary, however, we find that slave labour is gradually exterminated when brought into competition with free labour, except where legislative protection, or peculiarity of soil and climate, establish such a monopoly as to admit of an expensive system of management. The cultivation of indigo by slaves in Carolina, has been abandoned, and the price of cotton reduced one-half, since these articles have had to compete in the European markets with the productions of free labour; and notwithstanding an additional duty

on East India sugar of 10s. per cwt. and a transportation of three times the distance, the West India planters are beyond all doubt reduced to very great distress, and declare that they shall be ruined if sugar from the East Indies shall be admitted on the same terms as from the West.

If slave labour were cheaper than free labour, we might reasonably infer, that in proportion as the circumstances of the cultivators rendered economy indispensable, either from the difficulty of obtaining slaves, or other causes, the peculiar features of slavery would be more firmly established, and that every approach to freedom would be more sedulously shunned in the system of culture. But it is found by the experience of both ancient and modern times, that nothing has tended more to assimilate the condition of the slave to that of the free labourer, or actually to effect his emancipation, than the necessity imposed by circumstances of adopting the most economical mode of cultivation. . . .

If, then, it has appeared that we should be naturally led to infer, from the very constitution of human nature, that slave labour is more expensive than the labour of freemen; if it has appeared that such has been the opinion of the most eminent philosophers and enlightened travellers in different ages and countries; if it has appeared that in a state where slavery is allowed, land is most valuable in those districts where the slave system prevails the least, notwithstanding great disadvantages of locality; and that in adjoining states, with precisely the same soil and climate, in the one of which slavery is allowed, and in the other prohibited, land is most valuable in that state in which it is proscribed; if it has appeared that slave labour has never been able to maintain its ground in competition with free labour, except where monopoly has secured high profits, or prohibitory duties afforded artificial support; if it has appeared that, in every quarter of the globe, in proportion as the circumstances of the planter rendered attention to economy more indispensable, the harsher features of the slave-system have disappeared, and the condition of the slave has been gradually assimilated to that of the free labourer; and if it has appeared that the mitigation of slavery has been found by experience to substitute the alacrity of voluntary labour, for the reluctance of compulsory toil; and that emancipation has rendered the estates on which it has taken place, greatly and rapidly more productive — I need not, I think, adduce additional proofs of the truth of the general position, that slave labour is more expensive than the labour of freemen.

E. *Heavy Expense of Slave Labor, 1839* [1]

In any examination of the relative cost of the two systems of labor, the price of slaves necessarily occupied a prominent place. This phase of the subject was carefully considered by an English traveler, Mr. Buckingham, as follows:

On this question, of the false economy of employing slave-labour in the cultivation of the land, every thing I heard and saw confirmed me in the opinion, that it was most injurious to the interests of the planters; and that none would benefit more by a system of free labour than the very landowners themselves. At present, if a planter wishes to purchase an estate for cultivation, he can get 1000 acres of land for 10000 dollars; and if he could obtain free labour to till his fields, hiring it by the day, and paying for such labour as he required, and no more, 5000 dollars would be ample for a reserved capital by which to procure his seed, labour, and stock. But as he must, according to the present system, buy his slaves as well as his land, it will require at least 500 dollars, or £100 sterling, for each working negro that he may need; and supposing only 100 negroes to be purchased, this would require 50,000 dollars to be laid out in the purchase of *prospective* labour, paying for it before he receives the slightest benefit, and under all the risks of sickness, desertion, and death. In this manner, according to the statement of Mr. Clay, in his recent Anti-abolition speech in Congress, there is locked up, of dead capital, in the purchase and cost of the negro slaves of the United States, the enormous sum of twelve hundred millions of dollars, or about two hundred and fifty millions sterling! Now, if slavery had never been permitted to exist here, and labour could have been hired by the day, or week, or year, as in other free countries, this enormous amount of capital would have been available to devote to other purposes; and the whole country would have been advanced at least a century beyond its present condition.

It may be quite true that the African race can alone sustain the exposure to heat and labour combined, which the cultivation of rice, sugar, and cotton, demand; but it is at the same time as true, that their labour might be hired and paid for only as it was employed, instead of the ruinously improvident system of buying up all the labour of their lives, and paying for it beforehand; thus sinking an immense capital in the very country where capital is more valuable, because more productive of wealth, than in any other country that can be

[1] *The Slave States of America.* By J. S. Buckingham (London [1842]), I, 200–3, 401–2.

named. If a large manufacturer in England, when he had built his mill and fitted his machinery, were required to buy all his working hands at £100 each, and then maintain them all their lives, sick or well, aged or infirm, with the risk of loss by desertion or death, he would be less able to work his mill with £100,000 than he now is with £20,000; and consequently not half or a fourth of the mills now in operation could be established. If a shipowner, when he had built, equipped, and provisioned his ship for her voyage, had to buy up all his seamen at £100 a head, and maintain them all their lives afterwards, it would require four times the capital that is now necessary to send a large ship to sea, and consequently fewer persons could equip vessels. Thus the manufacturing and the shipping interests would both be retarded in their progress by this improvident and heavy burden of paying for a life of labour in advance, instead of paying for it by the week or the month, as its benefits were reaped by them.

Exactly the same effects are produced in retarding the prosperity of agriculture; and thus it is that the old slave-states of Virginia and Maryland are already exhausted. The Carolinas and Georgia are already partially so; and in process of time this will be the fate of Alabama, Mississippi, Kentucky, and the other slave-states; while those who employ the cheaper, more vigorous, and more productive element of free labour, will outstrip them in the race, from the mere advantage of a better system of industry. While I believe, therefore, that the condition of the slaves would be much improved by their being placed under the influence of those higher and better motives to labour which the enjoyment of the reward of their toil can alone create, I also believe that the planters would all benefit by the substitution of free-labour for slave-labour, because the former is cheaper and more productive than the latter can ever be made. The slave-owners are indeed their own enemies, in opposing or retarding the emancipation of their labourers. . . .

In the course of the protracted conversation to which these topics led, a gentleman from Kentucky, engaged in the growing of corn and grazing of cattle, himself a slaveholder to a considerable extent, and joining in all the denunciations of the Abolitionists, undertook to show, that after all, slavery was a much greater curse to the owners than it was to the slaves, as it absorbed their capital, ate up their profits, and proved a perpetual obstacle to their progressive prosperity. He said he had not only made the calculation, but actually tried the experiment of comparing the labour of the free white man and the

negro slave; and he found the latter always the dearest of the two. It took, for instance, 2000 dollars to purchase a good male slave. The interest of money in Kentucky being ten per cent, here was 200 dollars a year of actual cost; but to insure his life it would require at least five per cent more, which would make 300 dollars a year. Add to this the necessary expenses of maintenance while healthy, and medical attendance while sick, with wages of white overseers to every gang of men to see that they do their duty, and other incidental charges, and he did not think that a slave could cost less, in interest, insurance, subsistence, and watching, than 500 dollars or 100£ sterling a year; yet, after all, he would not do more than half the work of a white man, who could be hired at the same sum, without the outlay of any capital, or the incumbrance of maintenance while sick, and was, therefore, by far the cheapest labourer of the two.

F. *Radical View on the Inefficiency of Slave Labor, 1860* [1]

Not all the radical arguments were advanced by the friends of slavery. Those opposed to the system were oftentimes biased and intolerant, and even unfair. Perhaps the best known of the radical opponents of slavery was Mr. Helper of North Carolina, who pictured the evil effects of slavery on the south as follows:

It is a fact well known to every intelligent Southerner that we are compelled to go to the North for almost every article of utility and adornment, from matches, shoepegs and paintings up to cotton-mills, steamships and statuary; that we have no foreign trade, no princely merchants, nor respectable artists; that, in comparison with the free states, we contribute nothing to the literature, polite arts and inventions of the age; that, for want of profitable employment at home, large numbers of our native population find themselves necessitated to emigrate to the West, whilst the free states retain not only the larger proportion of those born within their own limits, but induce, annually, hundreds of thousands of foreigners to settle and remain amongst them; that almost everything produced at the North meets with ready sale, while, at the same time, there is no demand, even among our own citizens, for the productions of Southern industry; that, owing to the absence of a proper system of business amongst us, the North becomes, in one way or another, the proprietor and dispenser of all our floating wealth, and that we are dependent on Northern capitalists for the means necessary to build our railroads, canals and other public improvements; that if we want to visit a

[1] *The Impending Crisis.* By Hinton R. Helper (New York, 1860), 21–4.

foreign country, even though it may lie directly South of us, we find no convenient way of getting there except by taking passage through a Northern port; and that nearly all the profits arising from the exchange of commodities, from insurance and shipping offices, and from the thousand and one industrial pursuits of the country, accrue to the North, and are there invested in the erection of those magnificent cities and stupendous works of art which dazzle the eyes of the South, and attest the superiority of free institutions!

The North is the Mecca of our merchants, and to it they must and do make two pilgrimages per annum — one in the spring and one in the fall. All our commercial, mechanical, manufactural, and literary supplies come from there. We want Bibles, brooms, buckets and books, and we go to the North; we want pens, ink, paper, wafers and envelopes, and we go to the North; we want shoes, hats, handkerchiefs, umbrellas and pocket knives, and we go to the North; we want furniture, crockery, glassware and pianos, and we go to the North; we want toys, primers, school books, fashionable apparel, machinery, medicines, tomb-stones, and a thousand other things, and we go to the North for them all. Instead of keeping our money in circulation at home, by patronizing our own mechanics, manufacturers, and laborers, we send it all away to the North, and there it remains; it never falls into our hands again.

In one way or another we are more or less subservient to the North every day of our lives. In infancy we are swaddled in Northern muslin; in childhood we are humored with Northern gewgaws; in youth we are instructed out of Northern books; at the age of maturity we sow our "wild oats" on Northern soil; in middle-life we exhaust our wealth, energies and talents in the dishonorable vocation of entailing our dependence on our children and on our children's children, and, to the neglect of our own interests and the interests of those around us, in giving aid and succor to every department of Northern power; in the decline of life we remedy our eye-sight with Northern spectacles, and support our infirmities with Northern canes; in old age we are drugged with Northern physic; and, finally, when we die, our inanimate bodies, shrouded in Northern cambric, are stretched upon the bier, borne to the grave in a Northern carriage, entombed with a Northern spade, and memorized with a Northern slab!

But it can hardly be necessary to say more in illustration of this unmanly and unnational dependence, which is so glaring that it cannot fail to be apparent to even the most careless and superficial ob-

server. All the world sees, or ought to see, that in a commercial, mechanical, manufactural, financial, and literary point of view, we are as helpless as babes; that, in comparison with the Free States, our agricultural resources have been greatly exaggerated, misunderstood and mismanaged; and that, instead of cultivating among ourselves a wise policy of mutual assistance and co-operation with respect to individuals, and of self-reliance with respect to the South at large, instead of giving countenance and encouragement to the industrial enterprises projected in our midst, and instead of building up, aggrandizing and beautifying our own States, cities and towns, we have been spending our substance at the North and are daily augmenting and strengthening the very power which now has us so completely under its thumb. . . .

II. Southern Agriculture

An Unfavorable View, 1860 [1]

The way in which agriculture was carried on in all parts of the country robbed the soil of much of its fertility; but it was more especially in the south, where the heavy crops of cotton, tobacco and sugar cane were grown, that the "mining" of the soil progressed most rapidly. An authority on southern agriculture called attention in 1860 to the defective system of agriculture in that section as follows:

In no part of Christendom, enjoying a good government, and settled by an intelligent population, does land sell at so contemptible a price as in the Plantation States. In Georgia, for instance, land does not command an average price of five dollars per acre. Various causes have been assigned for this low value. It will be instructive to examine them.

The reason generally assigned at the South is the proximity of an abundance of cheap fertile lands at the West. If this be a sound reason at the South, it should also be true at the North, as it is as easy to reach new lands from New York as it is from Georgia. But land is steadily rising in value in New York and other northern States. The proximity of new lands cannot, therefore, be the cause of the low price of land at the South, as it does not produce this result at the North.

It is said, again, that the supply of land is greater than the demand, in consequence of the sparseness of our population; capital seeks its

[1] *Report of the Commissioner of Patents for the Year 1860.* Agriculture (Washington, 1861), 225–7. Article by Rev. C. W. Howard, Associate Editor of the *Southern Cultivator*, Kingston, Georgia.

most profitable investment. There is money enough in the Southern States to have given a much higher value to our land. But the truth is that prudent men have found that, under our present system, land will not pay an interest on more than its present price. Hence this capital, instead of being invested in land, is appropriated to the building of railroads, factories, &c. It will also be found that in the Southern States where the white population is least dense the lands are highest in price, and the reverse.

Many persons suppose that it is the form of labor prevalent at the South which diminishes the value of Southern lands. This supposition is worthy of a brief consideration.

The remarks made upon it will not touch the moral or political aspect of Negro Slavery; it will be considered merely as a matter of agricultural interest.

If Negro Slavery diminishes the value of Southern lands, it must produce this result in some one of the following forms.

Before noticing these forms it may be proper to make the general remark that at the South where the negroes are the most numerous the lands bear the highest price, as the rice, Sea Island cotton, and sugar-cane lands. Some of our best rice lands now command from two hundred to three hundred dollars an acre. The reason of this high price will be given hereafter.

Does slave labor affect injuriously the value of Southern lands from its want of constancy? It is the most constant form of labor. The negro has no court-house, no jury, no musters, no mill to attend. He has no provision to buy, and no anxiety or loss of time on this account; food for himself and family is provided. If his family are sick, careful nurses are provided for them. The details of cotton and rice culture could not be conducted with a form of labor less constant.

Is there a deficiency of vigor in slave labor? In all forms of out-of-door bodily and severe labor, to be continued for a length of time, the well-fed negro is more capable than the white man. The regular and almost universal allowance of food upon plantations shows that, as a general rule, the negroes have a sufficiency of hearty and nutritious food.

Is there a deficiency of intelligence in Slave labor? There is less intelligence than among white laborers at the North, in Scotland, and some parts of England; but not less intelligence than exists among the mass of French, Irish, and Belgian laborers. Yet land rates as high in Belgium as in any other part of Europe. The cultivation

is also as perfect as can be found elsewhere. It is not so much the intelligence of the laborers as of the controlling and directing mind, which is of the greatest moment in agriculture.

Is there a deficiency of economy in slave labor? The entire expense of a negro laborer on a plantation cannot be put down at more than fifty cents a day. Can any other labor in this country be obtained as cheaply as this? Beyond this, multitudes of men have largely increased their fortunes by the natural increase of their laboring force.

If there be no deficiency in the constancy, vigor, intelligence, or economy of slave labor, it cannot be supposed, with justice, to affect the value unfavorably of Southern land.

In the present excited state of the public mind it is proper to repeat the remark that this brief inquiry is made, not with a view to exciting discussion of a vexed topic, but solely of arriving at the true cause of the low price of Southern land, and of suggesting a remedy. This inquiry could not be conducted without an examination of the character of the labor employed upon the land.

Does the Southern climate affect injuriously the price of Southern lands? It does not; because the lands are of the greatest value (greater than anywhere else in the Union) in those parts of the South which are not sickly, as the rice lands. As a general remark, the climate of the middle belt of the Southern States, including rolling oak and hickory lands, very closely resembles the climate of France, which is considered to be the best climate of Europe for agricultural purposes. In most of this region there are but few days in winter in which the plough need be stopped on account of the frozen state of the earth.

Is there a deficiency in the natural fertility of the Southern soil? No one will pretend to say that the original fertility of the great body of the Southern States was inferior to that of the Middle and Northern States, where land has attained a great comparative value.

Is there a deficiency in the salable value of Southern products of the soil? These products generally command a better price at the South than the North. The most valuable products of the South, cotton and rice, are peculiar to it.

If the low value of landed estate at the South is to be attributed neither to the proximity of cheap Western lands, to slave labor, to defective climate, to sparseness of population, or deficiency in the value of its products, to what is this low value attributable?

The answer is, to the *Defective System of Southern Agriculture.* That system is defective, among others, in the following particulars:

1st. This system is such that the planter scarcely considers his land as a part of his permanent investment. It is rather a part of his current expenses. He buys a wagon and uses it until it is worn out, and then throws it away. He buys a plough or hoe, and treats both in the same way. He buys land, uses it until it is exhausted, and then sells it, as he sells scrap iron, for whatever it will bring. It is with him a perishable or movable property. It is something to be worn out, not improved. The period of its endurance is therefore estimated in the original purchase, and the price is regulated accordingly. If it be very rich level land, that will last a number of years, the purchaser will pay a fair price for it. But if it be rolling land, as is the great bulk of the interior of the Southern States, he considers how much of the tract is washed or worn out, how long the fresh land will last, how much is too broken for cultivation, and in view of these points determines the value of the property. Of course he places a low estimate upon it.

2d. The system of Southern agriculture is such that a very large proportion of the landed estate yields no annual income. A considerable amount is in woodland, yielding nothing but a supply of rails and fuel. This is to a great degree dead capital. A large number of acres on almost every farm in the older parts of the cotton States is worn out and at rest — of course paying no interest. The only paying part of the tract is that which is under the plough. The interest on the land which the planter does not cultivate must be charged to that which he does cultivate, and this brings down the value of the whole property to a very low figure.

3d. The Southern system of agriculture allows to land no value independent of the labor put upon it. The negro is the investment rather than the land. The value of the negro is instantly affected by a change in the price of cotton, while the value of the land which grows the cotton is comparatively unaffected. It is an extraordinary anomaly that perishable labor should take precedence of imperishable land. It is not uncommon to hear young men at the South giving it as a reason for their entering a profession, that while they owned a large body of land they owned but twenty or thirty negroes, and that it would be impossible to make a support with so small a force. When asked how the rest of the world managed who have no negroes, the reply is "our system differs from theirs, ours requires a large amount of labor."

Precisely, and therein it is defective, and until that defect be remedied, land will continue to be comparatively a drug in the market. It is the design of this Essay to show that it is possible to give land a value independent of any costly or complicated annual labor bestowed upon it.

4th. The Southern system of agriculture includes a succession of crops of a most exhausting or otherwise injurious character. These crops are cotton and corn, varied only by small grain. This succession is continued until the land is worn out and turned out to rest.

5th. These crops are not only exhausting and hurtful in consequence of the clean culture they require, but they also require an amount of labor not known elsewhere. If we consider the amount of productive land, that is, the number of acres yielding an annual income, we shall find the amount of labor used on an ordinary Southern plantation to be greater per productive acre than the amount of labor use in the most perfectly cultivated portions of Europe. In the latter every acre produces something, whether in pasture, meadow, or cultivated crops. At the South nothing but the cotton or grain pays. The rest of the plantation is idle.

III. Plantation Management

A. *Instructions of a Mississippi Planter to his Overseer, 1857* [1]

Many of the planters laid down definite rules for the management of their plantations and took care to see that their overseers faithfully carried out these rules as far as possible. The following instructions show the management of the slaves on a Mississippi plantation:

State of Mississippi, Coahoma County, near Friars Point, A. D. 1857.

The health, happiness, good discipline and obedience; good, sufficient and comfortable clothing, a sufficiency of good wholesome and nutritious food for both man and beast being indispensably necessary to successful planting, as well as for reasonable dividends for the amount of capital invested, without saying anything about the Master's duty to his dependants, to himself and his God — I do hereby establish the following rules and regulations for the management of my Prairie Plantation, and require an observance of the same by

[1] *Documentary History of American Industrial Society.* Edited by Ulrich B. Phillips and others (Cleveland, 1910), I, 112–5. Printed by permission of the publishers, The Arthur H. Clark Company.

any and all Overseers I may at any time have in charge thereof to wit: —

Punishment must never be cruel or abusive, for it is absolutely mean and unmanly to whip a negro from mere passion or malice, and any man who can do this is entirely unworthy and unfit to have control of either man or beast.

My negroes are permitted to come to me with their complaints and grievances and in no instance shall they be punished for so doing. On examination, should I find they have been cruelly treated, it shall be considered a good and sufficient cause for the immediate discharge of the Overseer.

Prove and show by your conduct towards the negroes that you feel a kind and considerate regard for them. Never cruelly punish or overwork them, never require them to do what they cannot reasonably accomplish or otherwise abuse them, but seek to render their situation as comfortable and contented as possible.

See that their necessities are supplied, that their food and clothing be good and sufficient, their houses comfortable; and be kind and attentive to them in sickness and old age.

See that the negroes are regularly fed and that their food be wholesome, nutritious and well cooked.

See that they keep themselves well cleaned: at least once a week (especially during summer) inspect their houses and see that they have been swept clean, examine their bedding and see that they are occasionally well aired; their clothes mended and everything attended to that conduces to their health, comfort and happiness.

If any of the negroes have been reported sick, be prompt to see what ails them and that proper medicine and attention be given them. Use good judgment and discretion in turning out those who are getting well.

I greatly desire that the Gospel be preached to the Negroes when the services of a suitable person can be procured. This should be done on the Sabbath; day time is preferable, if convenient to the Minister.

Christianity, humanity and order elevate all — injure none— whilst infidelity, selfishness and disorder curse some — delude others and degrade all. I therefore want all of my people encouraged to cultivate religious feeling and morality, and punished for inhumanity to their children or stock — for profanity, lying and stealing.

All hands should be required to retire to rest and sleep at a suitable hour and permitted to remain there until such time as it will be neces-

sary to get out in time to reach their work by the time they can see well how to work — particularly so when the nights are short and the mornings very cold and inclement.

Allow such as may desire it a suitable piece of ground to raise potatoes, tobacco. They may raise chickens also with privileges of marketing the same at suitable leisure times.

There being a sufficient number of negroes on the plantation for society among themselves, they are not to be allowed to go off the plantation merely to seek society, nor on business without a permit from myself or the Overseer in charge — nor are other negroes allowed to visit the plantation.

After taking proper care of the negroes, stock, etc. the next most important duty of the Overseer is to make (if practicable) a sufficient quantity of corn, hay, fodder, meat, potatoes and other vegetables for the consumption of the plantation and then as much cotton as can be made by requiring good and reasonable labor of operatives and teams.

Have a proper and suitable place for everything and see that everything is kept in its proper place, all tools when not in use should be well cleaned and put away.

Let the cotton be well dried before cleaning it. Be sure the seed put up for planting are well dried and a sufficient quantity saved to plant the farm two or three times over; and will suggest the propriety of sending a few trustworthy hands ahead of the regular pickers to gather from the early opening — where the plant is well supplied with bolls — for seed for planting the ensueing year; in this way by gathering sufficient quantity every year to plant twenty or twenty five acres we shall be able to keep up a supply of the best and most approved Seed — nor should there be less care observed in selecting the Seed corn from the crib.

I would that every human being have the gospel preached to them in its original purity and simplicity; it therefore devolves upon me to have these dependants properly instructed in all that pertains to the salvation of their souls; to this and whenever the services of a suitable person can be secured, have them instructed in these things — in view of the fanaticism of the age it behooves the Master or Overseer to be present on all such occasions. They should be instructed on Sundays in the day time if practicable, if not then on Sunday night.

J. W. Fowler.

B. *Management of Slaves on a Cotton Plantation, 1852* [1]

Detailed instructions for the management of a cotton plantation reveal the many-sided relations of the owner to his slaves.

My first care has been to select a proper place for my "Quarter," well protected by the shade of forest trees, sufficiently thinned out to admit a free circulation of air, so situated as to be free from the impurities of stagnant water, and to erect comfortable houses for my negroes. Planters do not always reflect that there is more sickness, and consequently, greater loss of life, from the decaying logs of negro houses, open floors, leaky roofs, and crowded rooms, than all other causes combined; and if humanity will not point out the proper remedy, let self-interest for once act as a virtue, and prompt him to save the health and lives of his negroes, by at once providing comfortable quarters for them. There being upwards of 150 negroes on the plantation, I provide for them 24 houses made of hewn post oak, covered with cypress, 16 by 18, with close plank floors and good chimneys, and elevated two feet from the ground. The ground *under* and around the houses is swept every month, and the houses, both inside and out, white-washed twice a year. The houses are situated in a double row from north to south, about 200 feet apart, the doors facing inwards, and the houses being in a line, about 50 feet apart. At one end of the street stands the overseer's house, workshops, tool house, and wagon sheds; at the other, the grist and saw-mill, with good cisterns at each end, providing an ample supply of pure water. My experience has satisfied me, that spring, well, and lake water are all unhealthy in this climate, and that large under-ground cisterns, keeping the water pure and cool, are greatly to be preferred. They are easily and cheaply constructed, very convenient, and save both doctors' bills and loss of life. The negroes are never permitted to sleep before the fire, either lying down or sitting up, if it can be avoided, as they are always prone to sleep with their heads to the fire, are liable to be burnt and to contract diseases: but beds with ample clothing are provided for them, and in them they are *made to sleep*. As to their habits of amalgamation and intercourse, I know of no means whereby to regulate them, or to restrain them; I attempted it for many years by preaching virtue and decency, encouraging marriages, and by punishing, with some severity, departures from marital obligations; but it was all in vain. I allow for each hand that works

[1] *The Industrial Resources of the Southern and Western States.* Edited by J. D. B. De Bow (New Orleans, 1852), II, 330–3.

out, four pounds of clear meat and one peck of meal per week. Their dinners are cooked for them, and carried to the field, always with vegetables, according to the season. There are two houses set apart at mid-day for resting, eating, and sleeping, if they desire it, and they retire to one of the weather sheds or the grove to pass this time, not being permitted to remain in the hot sun while at rest. They cook their own suppers and breakfasts, each family being provided with an oven, skillet, and sifter, and each one having a coffee-pot, (and generally some coffee to put in it,) with knives and forks, plates, spoons, cups, &c., of their own providing. The wood is regularly furnished them; for I hold it to be absolutely mean for a man to require a negro to work until daylight closes in, and then force him to get wood, sometimes half a mile off, before he can get a fire, either to warm himself or cook his supper. Every negro has his hen-house, where he raises poultry, which he is not permitted to sell, and he cooks and eats his chickens and eggs for his evening and morning meals to suit himself; besides, every family has a garden, paled in, where they raise such vegetables and fruits as they take a fancy to. A large house is provided as a nursery for the children, where all are taken at daylight, and placed under the charge of a careful and experienced woman, whose sole occupation is to attend to them, and see that they are properly fed and attended to, and above all things to keep them as dry and as cleanly as possible, under the circumstances. The suckling women come in to nurse their children four times during the day; and it is the duty of the nurse to see that they do not perform this duty until they have become properly cool, after walking from the field. In consequence of these regulations, I have never lost a child from being burnt to death, or, indeed, by accidents of any description; and although I have had more than thirty born within the last five years, yet I have not lost a single one from teething, or the ordinary summer complaints so prevalent amongst the children in this climate.

I give to my negroes four full suits of clothes with two pair of shoes, every year, and to my women and girls a calico dress and two handkerchiefs extra. I do not permit them to have "truck patches" other than their gardens, or to raise anything whatever for market; but in lieu thereof, I give to each head of a family and to every single negro, on Christmas day, five dollars, and send them to the county town, under the charge of the overseer or driver, to spend their money. In this way, I save my mules from being killed up in summer, and my oxen in winter, by working and hauling off their crops; and more than all, the negroes are prevented from acquiring habits of trading

in farm produce, which invariably leads to stealing, followed by whipping, trouble to the master, and discontent on the part of the slave. I permit no spirits to be brought on the plantation, or used by any negro, if I can prevent it; and a violation of this rule, if found out, is always followed by a whipping, and a forfeiture of the five dollars next Christmas.

I have a large and comfortable hospital provided for my negroes when they are sick; to this is attached a nurse's room; and when a negro complains of being too unwell to work, he is at once sent to the hospital, and put under the charge of a very experienced and careful negro woman, who administers the medicine and attends to his diet, and where they remain until they are able to work again. This woman is provided with sugar, coffee, molasses, rice, flour, and tea, and does not permit a patient to taste of meat or vegetables until he is restored to health. Many negroes relapse after the disease is broken, and die, in consequence of remaining in their houses and stuffing themselves with coarse food after their appetites return, and both humanity and economy dictate that this should be prevented. From the system I have pursued, I have not lost a hand since the summer of 1845, (except one that was killed by accident,) nor has my physician's bill averaged fifty dollars a year, notwithstanding I live near the edge of the swamp of Big Black River, where it is thought to be very unhealthy.

I cultivate about ten acres of cotton and six of corn to the hand, not forgetting the little wheat patch that your correspondent speaks of, which costs but little trouble, and proves a great comfort to the negroes; and have as few sour looks and as little whipping as almost any other place of the same size.

I must not omit to mention that I have a good fiddler, and keep him well supplied with catgut, and I make it his duty to play for the negroes every Saturday night until twelve o'clock. They are exceedingly punctual in their attendance at the ball while Charley's fiddle is always accompanied with Ihurod on the triangle, and Sam to "pat."

I also employ a good preacher, who regularly preaches to them on the Sabbath day, and it is made the duty of every one to come up clean and decent to the place of worship. As Father Garritt regularly calls on Brother Abram (the foreman of the prayer-meeting,) to close the exercises, he gives out and sings his hymn with much unction, and always cocks his eye at Charley, the fiddler, as much as to say, "Old fellow, you had your time last night; now it is mine."

I would gladly learn every negro on the place to read the Bible, but for a fanaticism which, while it professes friendship to the negro, is keeping a cloud over his mental vision, and almost crushing out his hopes of salvation.

These are some of the leading outlines of my management, so far as my negroes are concerned. That they are imperfect, and could be greatly improved, I readily admit; and it is only with the hope that I shall be able to improve them by the experience of others, that I have given them to the public.

Should you come to the conclusion that these rules would be of any service when made known to others, you will please give them a place in the "Review."

A Mississippi Planter.

RULES AND REGULATIONS FOR THE GOVERNMENT OF A SOUTHERN PLANTATION

1. There shall be a place for everything, and everything shall be kept in its place.

2. On the first days of January and July, there shall be an account taken of the number and condition of all the negroes, stock, and farming utensils of every description on the premises, and the same shall be entered in the plantation book.

3. It shall be the duty of the overseer to call upon the stock-minder once every day, to know if the cattle, sheep, and hogs have been seen and counted, and to find out if any are dead, missing, or lost.

4. It shall be the duty of the overseer, at least once in every week, to see and count the stock himself, and to inspect the fences, gates, and water-gaps, on the plantation, and see that they are in good order.

5. The wagons, carts, and all other implements, are to be kept under the sheds, and in the houses where they belong, except when in use.

6. Each negro man will be permitted to keep his own axe, and shall have it forthcoming when required by the overseer. No other tool shall be taken or used by any negro without the permission of the overseer.

7. Humanity on the part of the overseer, and unqualified obedience on the part of the negro, are, under all circumstances, indispensable.

8. Whipping, when necessary, shall be in moderation, and never done in a passion; and the driver shall in no instance inflict punish-

ment, except in the presence of the overseer, and when, from sickness, he is unable to do it himself.

9. The overseer shall see that the negroes are properly clothed and well fed. He shall lay off a garden of at least six acres, and cultivate it as part of his crop, and give the negroes as many vegetables as may be necessary.

10. It shall be the duty of the overseer to select a sufficient number of the women, each week, to wash for all. The clothes shall be well washed, ironed, and mended, and distributed to the negroes on Sunday morning; when every negro is expected to wash himself, comb his head, and put on clean clothes. No washing or other labor will be tolerated on the Sabbath.

11. The negroes shall not be worked in the rain, or kept out after night, except in weighing or putting away cotton.

12. It shall be the duty of the driver, at such hours of the night as the overseer may designate, to blow his horn, and go around and see that every negro is at his proper place, and to report to the overseer any that may be absent; and it shall be the duty of the overseer, at some hour between that time and daybreak, to patrol the quarters himself, and see that every negro is where he should be.

13. The negro children are to be taken, every morning, by their mothers, and carried to the houses of the nurses; and every cabin shall be kept locked during the day.

14. Sick negroes are to receive particular attention. When they are first reported sick, they are to be examined by the overseer, and prescribed for, and put under the care of the nurse, and not put to work until the disease is broken and the patient beyond the power of a relapse.

15. When the overseer shall consider it necessary to send for a physician, he shall enter in the plantation book the number of visits, and to what negro they are made.

16. When the negro shall die, an hour shall be set apart by the overseer for his burial; and at that hour all business shall cease, and every negro on the plantation, who is able to do so, shall attend the burial.

17. The overseer shall keep a plantation book, in which he shall register the birth and name of each negro that is born; the name of each negro that died, and specify the disease that killed him. He shall also keep in it the weights of the daily picking of each hand; the mark, number, and weight of each bale of cotton, and the time of sending the same to market; and all other such occurrences, relating

to the crop, the weather, and all other matters pertaining to the plantation, that he may deem advisable.

18. The overseer shall pitch the crops, and work them according to his own judgment, with the distinct understanding that a failure to make a bountiful supply of corn and meat for the use of the plantation, will be considered as notice that his services will not be required for the succeeding year.

19. The negroes, teams, and tools are to be considered under the overseer's exclusive management, and are not to be interfered with by the employer, only so far as to see that the foregoing rules are strictly observed.

20. The overseer shall, under no circumstances, create an account against his employer, except in the employment of a physician, or in the purchase of medicines; but whenever any thing is wanted about the plantation, he shall apply to his employer for it.

21. Whenever the overseer, or his employer, shall become dissatisfied, they shall, in a frank and friendly manner, express the same, and, if either party desires it, he shall have the right to settle and separate.

C. *Description of a Southern Rice Plantation, 1839*[1]

The instructions given by planters to their overseers reveal, no doubt, the brighter side of plantation life, for we may suppose that these instructions were given with the view of insuring humane treatment for the slaves. Travelers were almost unanimous in the opinion, however, that the slaves were often overworked and mistreated.

We visited one of the rice plantations in the neighborhood of Savannah, and saw the condition of the slaves on it with our own eyes. The estate was considered to be a valuable one, and under a fair condition of management, not among the best nor among the worst, but just such an average plantation as we wish to examine. The dwellings for the negroes were built of wood, ranged in rows of great uniformity, raised a little above the ground, each building containing two or more rooms, with a fire-place for two. We saw also the nursery for the children, and the sick-room or hospital for those who were hurt or diseased, and we had communication with the overseer, and several of the people, from both of whom we learnt the following facts, as to their routine of labour, food, and treatment.

[1] *The Slave States of America.* By J. S. Buckingham (London, [1842]), I, 132–4.

The slaves are all up by daylight; and every one who is able to work, from eight or nine years old and upwards, repair to their several departments of field-labour. They do not return to their houses either to breakfast or dinner; but have their food cooked for them in the field, by negroes appointed to that duty. They continue thus at work till dark, and then return to their dwellings. There is no holiday on Saturday afternoon, or any other time throughout the year, except a day or two at Christmas; but from daylight to dark, every day except Sunday, they are at their labour. Their allowance of food consists of a peck, or two gallons, of Indian corn per week, half that quantity for working boys and girls, and a quarter for little children. This corn they are obliged to grind themselves, after their hours of labour are over; and it is then boiled in water, and made into hominey, but without anything to eat with it, neither bread, rice, fish, meat, potatoes, or butter; boiled corn and water only, and barely a sufficient quantity of this for subsistence.

Of clothes, the men and boys had a coarse woolen jacket and trousers once a year, without shirt or any other garment. This was their winter dress; their summer apparel consists of a similar suit of jacket and trousers of the coarsest cotton cloth. Absence from work, or neglect of duty, was punished with stinted allowance, imprisonment, and flogging. A medical man visited the plantation occasionally, and medicines were administered by a negro woman called the sick-nurse. No instruction was allowed to be given in reading or writing, no games or recreations were provided, nor was there indeed any time to enjoy them if they were. Their lot was one of continued toil, from morning to night, uncheered even by the *hope* of any change, or prospect of improvement in condition.

In appearance, all the negroes that we saw looked insufficiently fed, most wretchedly clad, and miserably accommodated in their dwellings; for though the exteriors of their cottages were neat and uniform, being all placed in regular order and whitewashed, yet nothing could be more dirty, gloomy, and wretched than their interiors; and we agreed that the criminals in all the state prisons of the country, that we had yet seen, were much better off in food, raiment, and accommodation, and much less severely worked, than those men, whose only crime was that they were of a darker colour than the race that held them in bondage.

D. *The System of Task Work, 1854*[1]

In an effort to stimulate the slave to exert himself, many planters resorted to the system of task work. By this system a task was assigned to each slave to be finished within a certain time, with the understanding that any time the slave might have after the task was finished, was his own to spend on his own plot of ground. Mr. Olmsted, the best-known writer on conditions in the south just prior to the outbreak of the Civil War, described this system as follows:

After passing through tool-rooms, corn-rooms, mule-stables, store-rooms, and a large garden, in which vegetables to be distributed among the negroes, as well as for the family, are grown, we walked to the rice-land. It is divided by embankments into fields of about twenty acres each, but varying somewhat in size, according to the course of the river. The arrangements are such that each field may be flooded independently of the rest, and they are subdivided by open ditches into rectangular plats of a quarter acre each. We first proceeded to where twenty or thirty women and girls were engaged in raking together, in heaps and winrows, the stubble and rubbish left on the field after the last crop, and burning it. The main object of this operation is to kill all the seeds of weeds, or of rice, on the ground. Ordinarily it is done by tasks — a certain number of the small divisions of the field being given to each hand to burn in a day; but owing to a more than usual amount of rain having fallen lately, and some other causes, making the work harder in some places than others, the women were now working by the day, under the direction of a "driver," a negro man, who walked about among them, taking care that they left nothing unburned. Mr. X. inspected the ground they had gone over, to see whether the driver had done his duty. It had been sufficiently well burned, but, not more than quarter as much ground had been gone over, he said, as was usually burned in task-work,— and he thought they had been very lazy, and reprimanded them for it. The driver made some little apology, but the women offered no reply, keeping steadily, and it seemed sullenly, on at their work.

In the next field, twenty men, or boys, for none of them looked as if they were full-grown, were plowing, each with a single mule, and a light, New-York-made plow. The soil was very friable, the plowing easy, and the mules proceeded at a smart pace; the furrows were straight, regular, and well turned. Their task was nominally an acre and a quarter a day; somewhat less actually, as the measure

[1] *A Journey in the Seaboard Slave States.* By Frederick Law Olmsted (New York, 1859), 430–2.

includes the space occupied by the ditches, which are two to three feet wide, running around each quarter of an acre. The plowing gang was superintended by a driver who was provided with a watch; and while we were looking at them he called out that it was twelve o'clock. The mules were immediately taken from the plows, and the plow-boys mounting them, leapt the ditches, and cantered off to the stables, to feed them. One or two were ordered to take their plows to the blacksmith, for repairs. . . .

The plowmen got their dinner at this time: those not using horses do not usually dine till they have finished their tasks; but this, I believe, is optional with them. They commence work at sunrise, and at about eight o'clock have breakfast brought to them in the field, each hand having left a bucket with the cook for that purpose. All who are working in connection leave their work together, and gather in a social company about a fire, where they generally spend about half an hour at breakfast time. The provisions furnished them consist mainly of meal, rice and vegetables, with salt and molasses, and occasionally bacon, fish, and coffee. The allowance is a peck of meal, or an equivalent quantity of rice per week, to each working hand, old or young, besides small stores. Mr. X. says that he has lately given a less amount of meat than is now usual on plantations, having observed that the general health of the negroes is not as good as formerly, when no meat at all was customarily given them. The general impression among planters is, that the negroes work much better for being supplied with three or four pounds of bacon a week.

The field-hands are all divided into four classes, according to their physical capacities. The children beginning as "quarter-hands," advancing to "half-hands," and then to "three-quarter hands;" and, finally, when mature, and able-bodied, healthy and strong, to "full hands." As they decline in strength, from age, sickness, or other cause, they retrograde in the scale, and proportionately less labor is required of them. Many, of naturally weak frame, never are put among the full hands. Finally, the aged are left out at the annual classification, and no more regular field-work is required of them, although they are generally provided with some light, sedentary occupation. I saw one old woman picking "tailings" of rice out of a heap of chaff, an occupation at which she was literally not earning her salt. Mr. X. told me she was a native African, having been brought when a girl from the Guinea coast. She spoke almost unintelligibly; but after some other conversation, in which I had not been

able to understand a word she said, he jokingly proposed to send her back to Africa. She expressed her preference to remain where she was, very emphatically. "Why?" She did not answer readily, but being pressed, threw up her palsied hands, and said furiously, "I lubs 'ou mas'r, oh, I lubs 'ou. I don't want to go 'way from 'ou."

The field hands, are nearly always worked in gangs, the strength of a gang varying according to the work that engages it; usually it numbers twenty or more, and is directed by a driver. As on most large plantations, whether of rice or cotton, in Eastern Georgia and South Carolina, nearly all ordinary and regular work is performed *by tasks;* that is to say, each hand has his labor for the day marked out before him, and can take his own time to do it in. For instance, in making drains in light, clean meadow land, each man or woman of the full hands is required to dig one thousand cubic feet; in swamp-land that is being prepared for rice culture, where there are not many stumps, the task for a ditcher is five hundred feet: while in a very strong cypress swamp, only two hundred feet is required; in hoeing rice, a certain number of rows, equal to one-half or two-thirds of an acre, according to the condition of the land; in sowing rice (strewing in drills), two acres; in reaping rice (if it stands well), three-quarters of an acre; or, sometimes a gang will be required to reap, tie in sheaves, and carry to the stack-yard the produce of a certain area, commonly equal to one-fourth the number of acres that there are hands working together. Hoeing cotton, corn, or potatoes; one half to one acre. Threshing; five to six hundred sheaves. In plowing rice-land (light, clean, mellow soil) with a yoke of oxen, one acre a day, including the ground lost in and near the drains — the oxen being changed at noon. A cooper, also, for instance, is required to make barrels at the rate of eighteen a week. Drawing staves; 500 a day. Hoop poles; 120. Squaring timber; 100 ft. Laying worm-fence; 50 panels per hand. Post and rail do., posts set $2\frac{1}{2}$ to 3 ft. deep, 9 ft. apart, nine or ten panels per hand. In getting fuel from the woods, (pine, to be cut and split,) one cord is the task for a day. In "mauling rails," the taskman selecting the trees (pine) that he judges will split easiest, one hundred a day, ends not sharpened.

These are the tasks for first class able-bodied men, they are lessened by one quarter for three quarter hands, and proportionately for the lighter classes. In alloting the tasks, the drivers are expected to put the weaker hands, where (if there is any choice in the appearance of the ground, as where certain rows in hoeing corn would be less weedy than others), they will be favoured. . . .

IV. The Internal Slave Trade

The Movement of Slaves toward the South, 1840–1860 [1]

There has been a great deal of discussion about the magnitude of the internal slave trade during the years preceding the Civil War. Some have contended that slaves were bred in the border states for the markets of the lower-south. Others have denied that such was the case. There is no doubt, however, that many slaves were raised in Virginia and Kentucky and then sent to the gulf regions. In the absence of definite statistics on the subject, the extent of this trade can never be definitely known. The following is merely a well-founded opinion:

. . . It is this, the profit developed by trading in slaves, and this alone, which has enabled slavery in the older slave states of North America to survive the consequences of its own ravages. In Maryland and Virginia, perhaps also in the Carolinas and Georgia, free institutions would long since have taken the place of slavery, were it not that just as the crisis of the system had arrived, the domestic slave trade opened a door of escape from a position which had become untenable. The conjuncture was peculiar, and would doubtless by Southern theologians be called providential. The progress of devastation had reached the point at which slave cultivation could no longer sustain itself — the contingency predicted by Roanoke, when, instead of the slave running away from his master, the master should run away from his slave. A considerable emigration of planters had actually taken place, and the deserted fields were already receiving a new race of settlers from the regions of freedom. The long night of slavery seemed to be passing away, and the dawn of a brighter day to have arrived, when suddenly the auspicious movement was arrested. A vast extension of the territory of the United States, opening new soils to Southern enterprise, exactly coincided with the prohibition of the external slave trade, and both fell in with the crisis in the older states. The result was a sudden and remarkable rise in the price of slaves. The problem of the planter's position was at once solved, and the domestic slave trade commenced. Slavery had robbed Virginia of the best riches of her soil, but she still had a noble climate — a climate which would fit her admirably for being the breeding place of the South. A division of labour between the old and the new states took place. In the former the soil was extensively exhausted, but the climate was salubrious; in the latter the climate was unfavorable to human life spent in severe toil, but the soil was teeming with riches. The old states, therefore, undertook the part

[1] *The Slave Power.* By J. E. Cairnes (London and Cambridge, 1863), 124–31.

of breeding and rearing slaves till they attained to physical vigour, and the new that of using up in the development of their virgin resources the physical vigour which had been thus obtained.

The charge of breeding slaves for the market is one which the citizens of Virginia, more especially when resident in Europe, are apt indignantly to deny; and, in a certain sense, the denial may not be wholly destitute of foundation. It is perhaps true that in no particular instance is a slave brought into the world for the purpose, distinctly conceived beforehand, of being sold to the South. Nevertheless it is absolutely certain that the whole business of raising slaves in the Border states is carried on with reference to their price, and that the price of slaves in the Border states is determined by the demand for them in the Southern markets. "Nowhere," said Henry Clay, "in the farming portion of the United States would slave labour be generally employed, if the proprietors were not tempted to raise slaves by the high price of the Southern markets which keeps it up in their own." Of the truth of this remark an illustration was afforded in 1829, when a law having been passed by the state legislature of Louisiana interposing obstacles to the introduction of slaves into that state, within two hours after this was known the price of slaves on the breeding grounds of the North fell 25 per cent. Again, at a later epoch, when the efforts of the Border slaveholders to establish slavery in California had failed, what was the comment on this failure made by a candidate for the governorship of Virginia, then on an electioneering tour through the state? — that, but for this, the price of an able-bodied negro would have risen to 5,000 dollars — in other words, that the closing of the Californian mines to slave labour represented a loss to that state of 4,000 dollars per head on every first class Virginian slave. Such is the aspect under which the extension of the domain of slavery is regarded in Virginia — a point of view somewhat hard to reconcile with the air of injured virtue assumed by the 'Old Dominion' in its repudiation of the internal slave trade.

Indeed it would be futile to deny — nor is it denied by the more outspoken of the Southern politicians — that the markets of the South form the main support of slavery in the older Slave States. Of the extent to which the trade is carried, and the important interests depending on it, some notion may be formed from its effects on the census. For the purpose of exhibiting these I shall compare the population returns of the three principal Border states,— Virginia, Maryland and Kentucky,— with those of three working states in the extreme south-west,— Arkansas, Mississippi, and Louisiana.

PERCENTAGE INCREASE OF POPULATION IN THE DECADE ENDING 1850

	Whites	Slaves
Virginia	20.77	5.21
Maryland	31.34	0.70
Kentucky	28.99	15.75
Arkansas	110.16	136.26
Mississippi	65.13	58.74
Louisiana	61.23	45.32

It will be seen from the above that, while in the former group of states the white population has progressed with, on the whole, tolerable regularity, the slave population has, in two of them, scarcely advanced at all, and in the third at a rate far short of that attained by the white population. On the other hand, in the latter group — a group composed of states in which it is perfectly notorious that plantation labour is far severer than in the former — the slave population has in one instance increased with much greater rapidity than the whites, and in another at almost the same rate. Even in Louisiana the increase of the slave population has not fallen greatly behind that of the whites, although the circumstances of that state might well lead us to expect this result, being, as it is, the seat of a great commercial city with a large and rapidly growing white population, and its prevailing industry — the cultivation of sugar — being, as is well known, enormously destructive of slave life.

CHAPTER XVIII

DEVELOPMENT OF AGRICULTURE, 1860–1915

I. Foreign Trade in Agricultural Products

Extent and Character, 1878–1912[1]

Agriculture furnishes by far the greater share of the country's exports. The extent of this trade herewith is indicated in a Report of the Department of Agriculture as follows:

HIGH VALUE OF NATIONAL SURPLUS

Over a billion dollars is, for the fourth time, the value of the exports of farm products. It is sufficient to pay the expenses of the National Government. As long ago as 1878 the value of agricultural exports reached half a billion dollars; by 1892 the amount had touched $800,000,000; and by 1901 it had grown to $950,000,000. The billion-dollar mark was reached in 1907, when the value of agricultural exports amounted to $1,054,000,000. That amount has not since been equaled, but the exports of 1908 and 1911 exceeded a billion dollars in value, and in 1912 the amount fell short of the record exports by only $4,000,000.

RISING QUANTITY OF EXPORTS

The high value is not entirely due to high prices. The trend of the quantity of the exports of particular commodities can best be understood by using index numbers. Let the quantities of the average yearly exports of the 10 years 1900 to 1909 be represented by 100 and convert the quantities of the exports of other groups of years and of individual years into terms related to that basis. It will then appear that the exports of oleo oil have increased year by year after the period of 1900 to 1909 to the relative amount of 112.3 in 1912. This commodity was exported this year to the value of $13,000,000.

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[1] *Annual Report of the Department of Agriculture, 1912* (Washington, 1913), 22–4.

Lard compounds also have increased above the average of the period 1900 to 1909, the relative number for 1912 being 114.8. The exports of this commodity are this year as high as $5,000,000. Various animal oils, not specifically described, have increased in exports during the last three years. Another commodity that is increasing in exports is eggs, which have arisen to the relative number 359.8 in comparison with 100 as representing the 10 years 1900 to 1909. In 1912 the value of these exports amounted to $3,400,000. The exports of mutton amount to only a few hundred thousand dollars in value, but they are increasing, and the relative number for 1912 is 283.1 in comparison with 1900 to 1909.

The exports of cured pork hams declined in 1910 and 1911 to about three-quarters of the average from 1900 to 1909, but in 1912 the exports were very nearly restored to the former amount. Lard is another commodity that has been climbing back to former importance as an exported commodity, and the quantity exported in 1912 is indicated by 88.8. If the exports of pork and of all of its products are consolidated, it will appear that they are rapidly returning to the average exports of 1900 and 1909.

Cotton is the great mainstay of the export trade. Marked increase in exports is conspicuous. Compared with the average exports of 1900 to 1909 represented by 100, the exports of 1890 to 1899 were 79.7; the exports of 1910 were 85.7; in 1911 they were 107.8; and in 1912 the relative number is 147.9.

Apples are supporting an increased export trade, which now amounts to about $10,000,000. The export trade in dried apples is steadily increasing, and in comparison with the average of 1900 to 1909, the exports of 1912 are represented by 159. For fresh apples the exports of 1912 are represented by 124.1. Prunes are a fruit that has reversed the tide of international trade. Its exports now amount to several million dollars a year, and are increasing. During the last three years the exports of this fruit were nearly double the average of the period 1900 to 1909. Raisins have done better yet, and now amount to about four times the average exports of the period mentioned. Their value is more than a million dollars. Glucose and grape sugar, with exports amounting to several million dollars a year, are contributing to the foreign trade annual quantities above the average of the 10-year period mentioned.

To the list of commodities whose exports are increasing and are above the average of the 10 years, 1900 to 1909, or very close to that average, may be added hops, corn-oil cake, cotton-seed oil cake and

oil-cake meal, flaxseed oil cake and oil-cake meal, cotton-seed oil, linseed oil, rice, cotton seed, tobacco; and the four vegetables, beans, pease, onions, and potatoes.

The foregoing would be quite a respectable list even though cotton were omitted. Beef and its products have gone into a sorry decline in the export trade, but wheat flour still maintains a high relative showing, as is indicated by 71.2 in comparison with the annual average of the 10 years, 1900 to 1909, and has steadily increased in exports during the last three years. The exports of wheat, including flour converted to wheat, amounted to 80,000,000 bushels in 1912.

The general fact, however, is that the packing-house products have declined in value of exports since 1906, when they reached their highest value, $208,000,000, and have declined still more in quantity because of the increasing prices, yet the value of packing-house exports has increased since 1910 and reached the amount of $164,000,000 in 1912. So with grain and grain products, the quantity in the aggregate is diminishing as well as the value, and the high export values of five and six years ago have not since been equaled. In 1912 the export group known as grain and grain products had a value of $123,000,000.

IMPORTS

Agricultural imports are steadily increasing in value, subject to some fluctuations. They reached their highest value in 1912, when they amounted to $784,000,000. This was an increase of about $100,000,000 over 1911 and 1910, the years of highest import values preceding 1912. Notable increases are found in the imports of coffee, sugar and molasses, tobacco, wool, and packing-house products, in which hides and skins are very prominent.

LARGE BALANCE OF TRADE MAINTAINED

It is apparent that since 1908 the balance in the foreign trade in agricultural products has not kept up to its former figure, but, as has already been said, this is not because of diminished export values, but is due to a greater increase of imports than exports. Notwithstanding this, the balance in favor of exports of farm products was as high as $278,000,000 in 1912, and this was higher than the amount for 1910 and also for 1909.

At no time before 1912 have farm products been hard pushed, nor, indeed, closely approached, by products other than agricultural ones in contribution to the balance of trade in favor of all exports.

It was not until 1898 that products other than agricultural had a balance in favor of exports, but twice since that time — in 1903 and 1910 —the balance was in favor of exports. The balance in favor of the exports of these commodities was only $5,000,000 below the agricultural balance in 1912.

FOREST PRODUCTS

Forest products were exported in 1912 to the value of $108,000,000, and this was greater than the amount for any preceding year. This is partly due to high prices, yet there were increases in the quantities of the exports of boards, shooks, rosin, and turpentine.

The imports, as well as the exports, of forest products exhibited a marked tendency to increase in value in recent years, and during these years the imports have very much exceeded the exports in value. In 1912 the imports of forest products were valued at $173,000,000, or $58,000,000 more than the foreign and domestic exports.

II. Land Tenure in the United States

A. *Land Tenure in 1880*[1]

One of the marked differences between farming in the United States and farming in Europe has been the manner of holding lands. In this country land has been not only easily acquired, but also easily transferred. The advantages of this system over the tenancy system in Europe is given in the Tenth Census as follows:

The methods of agriculture in any country are, of necessity, based upon its system of land tenure. Local systems of land-ownership and land-holding, and even traditional customs not compelled by statute law, but which become a sort of unwritten law, are not easily changed, even if very faulty; but when changed agriculture adapts itself to the new conditions with comparative ease, although usually not quickly. Fortunately for us feudalism never existed here, and has not, therefore, left its evil influence on our land laws, or on the sentiments and traditions connected with agriculture, or on the political and social life of either land-owners or farm laborers. Our homestead and pre-emption laws have made it possible for each man to become a land-owner upon actual occupation and settlement, and our land laws secure to the proprietor perfect title, absolute ownership, complete control and easy sale or transfer. Land has here neither social nor political value, but merely its agricultural value, and it is placed

[1] *Tenth Census, 1880.* Report on the Productions of Agriculture (Washington, 1883), 523–5.

as nearly as is possible on a level with other property as to title, ownership, transfer, in the burdens it bears and the privileges it confers.

This simplicity of tenure and the abundance of cheap or new land have made it possible for every able-bodied man of average capacity to satisfy that desire which has become instinctive in our race and own a home. A natural result is that in the grain-growing district the great majority of farmers own the land they till, and that as the population becomes more dense the improved lands become more divided and the average size of the holdings is smaller. We see this going on in every state. The effect of this diminution in the average size of the farms upon agricultural production is not as simple as might at first seem, and, owing to the special conditions, the evils resulting from extreme subdivision in some portions of the Old World do not exist here, where the subdivision has nowhere reached any such figures as it has there. At the census of 1870 the least average size of the farms in the chief grain-growing states was over 100 acres, while the arguments that are so often quoted against subdivision in the Old World apply mostly to farms of from 2 to 15 acres. In all of the states growing much grain a farm of 50 acres, or even one of 80 acres, is called a "small farm." The cases of France and Ireland are most frequently cited as showing the evil effects of extreme subdivision in the Old World, but neither case is at all parallel with ours. In both countries the land is tilled by a peasantry, and the subdivision there is much greater than here. The French people own their land, and the country is, as a consequence, a highly productive one. The scale of farming is low, the animals are usually of poor breeds, but the crops are good and of excellent quality. It is in the production of domestic animals and in the use of labor-saving machinery that small farming stands at the greatest disadvantage. In America there is no peasantry, and, moreover, there is no distinction of class among land-owners. The small owner is socially equal to the large owner, the only difference being that which comes from a difference of wealth, which is vastly less in the country between large and small farmers than in the cities between men doing a large business and those doing a small business. In France the small farmers are peasants, in Ireland not only peasants but tenants, and in both cases without either the aspirations or the incentives which a small American farmer has. The difference of previous history, local traditions, and social customs is so great that no parallel can be drawn.

The difference in the density of population also regulates the in-

tensity of the farming. Where the population is very dense, and must be fed from the soil, there farming must be intense, no matter how much it costs, or the people will starve. In this country the abundance of new land, and the ease with which it may be acquired, has prevented an intense farming. It is this, and not a lack of either intelligence or of enterprise, that gives us a low average yield of grain per acre, compared with that of the more densely populated agricultural districts of Europe. Wherever it pays to farm more intensely American farmers are not slow to see it, but it is curious to see how many who discuss this matter entirely ignore the great natural law that as the methods of farming become more and more intense the increase of crop is not proportionate to the increase of cost in producing it.

A given soil will easily produce a certain average of crop with a certain amount of labor and expense. We may increase the labor and expense, and for a time get a more than corresponding increase of crop. If we continue in the same direction, we soon reach a point beyond which the increase in yield is not proportionate to the increase in expense, but grows less and less, and at last a point is reached beyond which no amount of additional expense will increase the average yield. In short, there is no limit to the expense that may be applied to the production: there is a limit to the average yield, and even to the possible yield, and the ratio of cost to production varies all along the line. We have our droughts and our mishaps, but our less intense system of agriculture, under our system of land tenure, is more flexible, and can stand shocks another system might not sustain.

The agriculture of the United Kingdom is just now of especial interest to us, because of the contrast it presents with ours, the agricultural distress now existing there, and also because they are so largely our customers and feel so keenly our competition.

The system of land tenure, the density of population, and the social and political factors involved, slowly brought English agriculture up to an intensity which could not stand the pressure of the recent bad years. It had too many fixed points in it to meet the emergency and stand the strain while adjusting itself to new conditions. Land had acquired a value it could not hold — no new thing of late years.

A similar thing has happened in some localities in New England, where many farms have fallen in value at some time during the past thirty years as much as in the worst cases in England, the result being

due largely to western competition. But here the land-owner and the farmer are one and the same person, and as the causes were working gradually the value of the land and the cost of production imperceptibly readjusted themselves to each other. This new adaptation went on slowly by a perfectly natural process, guided only by the laws of production and of markets. There was decreased profit during the change, but no "distress," and practically no bankruptcy.

The system of land tenure made it possible and easy for any one dissatisfied with the condition to sell out, if he chose, at any time on the best terms that offered and "go West," if he wished, before bankruptcy befell him, and give way to some one else who could and would utilize such advantages as the old place afforded. All this was a purely economic problem for each one to work out for himself. There were not two or three antagonistic classes in interest involved on each farm, each increasing the actual loss by trying to crowd so much of it as possible on the other, and there were no social or political factors involved. In places the actual effects have been so great that lands once tilled have been turned back again into woodlands, and the population of numerous farming towns has actually decreased; but this has gone on without either social or political disturbance, the laws of adaptation pertaining to this industry have been free to act, and the problem quietly solves itself.

But in countries where farmers, as a rule, must rent the land, and two different classes, economically and socially, are involved, whose interests are antagonistic, the farmer feels the pressure first, because he has not perfect freedom to adapt his methods and his production to varying conditions as rapidly as the conditions themselves vary. The agriculture of those countries will adapt itself to the new condition of things in time, because, as already shown, the industry itself will not and cannot be killed. It will shape itself anew, in conformity with the new pressure exerted upon it, but so long as the present difference of system of land tenure prevails that now exists the agriculture competition of the Mississippi basin must produce very different effects in the United Kingdom, France, and Germany from those produced in the parts of the United States which suffer from the same competition. The farmer working lands belonging to another, by methods and under a system which has regard to another's interest even more than to his own, and on a scale of intensity fixed in previous years and under other economic conditions, without that absolute freedom to manage and control his own business in such ways as his own judgment suggests or his

own tastes prompt, must work at a disadvantage in competition with another farmer who has this freedom.

Fixity of tenure, the right to hold possession so long as the pecuniary ability or the taste of the possessor determines, and the freedom to sell at the best advantage when he will and to whom he will, is another element the political and social effect of which are probably even greater than the economical ones. If insecurity of tenure be combined with great subdivisions of land, then we see the worst effects, of which Ireland is a conspicuous example. . . .

The economic phase of our system of land ownership which most directly and immediately affects grain production, the one which has been so much dwelt upon, is the perfect freedom the system gives the American farmer to adapt his methods to suit his own special conditions and to specialize his productions as best suit his own tastes. . . .

The relation which this industry bears to the political system of the country is no less important than the immediately economical ones, for agriculture and land tenure bear peculiar and special relations to social progress and political stability. From the nature of the vocation its problems must always be specially related to political problems and its progress to political progress.

B. *Farm Tenancy in the South, 1902* [1]

Considerable attention has been directed to farm tenancy, particularly in the south. There greater changes have occurred than in the north, owing to a change in the character of the workmen. The large plantations of ante-bellum days have been broken up, and in the place of slaves directed by overseers there now stands a large group of free negro tenant-farmers. The status of tenant-farmers in that region has been described as follows:

It is stated, on apparently good authority, that in the cotton counties around Dallas, Waco, and the bottoms of the Brazos River, Texas, 75 per cent of the best cotton land is owned by men who live in large towns, and is farmed by a poor and shiftless class of whites and negroes who, under the strict and unceasing supervision of the owner, or his agent, generally make for the owner a handsome profit upon the present valuation. The cotton planter with, say, 2,000 acres of fertile land divides it into tracts varying from 50 to 100 acres each. Each tract is fenced and improved to the extent of a house, barn, and corncrib. This tract is leased for a year, beginning with

[1] *Final Report of the Industrial Commission.* (Washington, 1902), Volume XIX of the Commission's Report, 97–9.

January 1. Although the planters prefer that the tenants should furnish their own stock, implements, and seed, it is difficult to find renters who are sufficiently well equipped or have enough capital to take the land on such terms. In nearly every case the landlord is expected to furnish everything, including food and clothing for the family, until such time as the crop is harvested and sold.

The system of overseeing by the agent of the landowner is usually such as to enforce the rights of the owners in keeping the stock and implements from abuse or neglect. Nevertheless, this system of absenteeism has the seeds of economic self-destruction in it. A system of supervision does not develop but destroys efficiency on the part of the tenant. The general disposition is to lay everything to the shiftlessness of the renters. On the other hand, it is stated by one of the leading planters in McLennan County, Tex., that a properly conducted cotton farm in the neighborhood of Waco will pay from 30 to 50 per cent upon its valuation. This, however, requires the strictest attention to detail and very strict handling of the people who till the soil. He states that of about 1,300 farmers in McLennan County over 1,200 are tenant farmers. There is a general tendency on the part of landlords to increase the size of their holdings, and the men who already have the land and money are more apt to absorb adjacent tracts than they are to allow the tenant to buy land. The German farmers in this portion of the country appear to be prosperous, and are noted for remaining a much longer time on the same farm as renters, usually several years elapsing before a change is made. One German tenant is cited who rented the same piece of ground from the same landlord for 13 years, and left him because the landlord would not sell him the farm which he had cultivated and in which he desired to put his savings. It appears, therefore, that it is sometimes difficult for renters to obtain land, even when they have the means to pay for it.

When the planter, in many parts of the Southern States, leases his ground and furnishes nothing to make a crop, he receives one-third or one-fourth of the crop. Cash rental is the exception rather than the rule. Where the planter furnishes the live stock, implements, and supplies, he gets one-half of the cotton and one-half of the corn, and deducts from the renter's share of the crop money an amount sufficient to pay liberal prices for all supplies furnished and liberal interest on the money. The result of this system is that the renters rarely ever succeed in laying by a surplus. On the contrary, their experiences are so discouraging that they seldom remain on the same

farm for more than a year. They are not only unable to lay by any money, but their children remain uneducated and half clothed. The system is apparently one of the most undesirable, so far as its effect on the community is concerned, without, of course, implying any questionable motive to the owner of the land. The landowner himself is not necessarily at fault. He is obliged to be liberal in furnishing supplies and stock to the tenant, whose manner of using these resources may be the most wasteful. During unfavorable years, the profit may wholly disappear or leave a deficit in his account, so that during favorable years it is necessary to make good the loss.

The tenant system or crop-sharing system, which seems to be the prevailing feature of land tenure throughout the cotton belt, is not regarded as an advantageous arrangement between the tenants and landlords, but, on the contrary, would be gladly gotten rid of for a better system if the conditions permitted it. Where the tenant system prevails, the tenant is furnished with a house, water, fuel, pasturage for his stock, a share of the fruit on the place, a garden, a shelter for stock, and storage for crops. The crop is in some cases divided as follows: One-fourth of the cotton, one-third of the corn, and one-half of the small grain goes to the landlord, the balance to the tenant, the landlord furnishing the land and stock and his share of the fertilizers. Under this system the crop, to a great extent, and the land, generally, are apt to be neglected. The tenant is desirous of expending as little labor as possible and the landlord of getting the largest crop return. The permanent value of the land is apt to be sacrificed for lack of competent supervision, and deterioration of the property in general is quite certain to grow at a more rapid rate than under a different system of occupancy. The renter has little or no interest in the maintenance of permanent improvements. This is especially true where the contract is made for a year at a time, admitting of frequent changes of tenants and enabling them to evade the responsibilities of careful management and methods of cultivation. Consequently both the permanent improvements and the quality of the soil deteriorate under this system. The tenant is, furthermore, at a disadvantage in exchanging his crop for family supplies. He sells his corn at the lowest price to the country merchant from whom he gets his provisions in exchange, paying the highest price the country merchant sees fit to demand. This same corn which is sold early in the fall may have to be bought back from the country merchant by the tenant late in the winter at from 50 to 100 per cent advance. The economic effects of such a system are to the disadvantage of the

tenant in both transactions, both as a producer and a consumer, and no system of such a character has in the history of agriculture ever led, if uncorrected, to anything but failure.

III. Agriculture and Labor

A. *Workers in Agriculture, 1850–1910* [1]

Although the number of persons engaged in agriculture increased almost six-fold during the period 1850–1910, the relative number decreased. In 1850 almost one-half the persons engaged in gainful occupations were on the farms, while in 1910 less than one-third of them were so engaged.

Census Year	Population	Number of Persons in all Pursuits	Number of Persons in Agricultural (a)	Percentage of	
				Total Population Occupied	Occupied Population in Agriculture
1850	23,191,876	5,371,876 (b)	2,406,731	23.2	44.8
1860	31,443,321	8,287,043 (c)	3,343,328	26.4	40.4
1870	38,558,371	12,505,923 (d)	5,922,335	32.4	47.4
1880	50,155,783	17,392,099 (d)	7,669,432	34.7	44.1
1890	62,947,714	22,735,661 (d)	8,463,365	36.1	37.2
1900	75,994,575	29,073,233 (d)	10,268,138	38.3	35.3
1910	91,972,266	38,167,336 (d)	12,373,159	41.5	32.4

(*a*) Exclusive of lumbermen, raftsmen, woodchoppers, apiarists, fishermen, oystermen, foresters, owners and managers of log and timber camps, and those engaged in other agricultural and annual husbandry pursuits, so far as separately reported. (*b*) Free males over fifteen years of age. (*c*) Free males and females over fifteen years of age. (*d*) Males and females over ten years of age.

B. *Foreigners in American Agriculture, 1899* [2]

Contrary to popular opinion many of what are usually called the "later immigrants" have gone into agriculture. The character and extent of this movement is indicated in the following extract:

The overflow of foreign-born population in the cities has turned attention recently to the cultivation of land as a field for immigrants

[1] Adapted from the Census Reports, 1850–1910, by Dr. Charles L. Stewart, of the University of Illinois.

[2] *Final Report of the Industrial Commission* (Washington, 1902), Volume XIX of the Commission's Report, 49–54.

to the United States. Among the most successful nationalities are the Italians. Most of them, in southern Italy especially, have been trained in the methods of intensive agriculture. One drawback hitherto has been the absence of any village system of living on the part of the rural population of the United States, such as characterizes agricultural society in Italy, Hungary, and through many portions of Germany and France. Where systematic efforts have been made under the colonizing principle, many communities of farmers have been established in the United States. Among these may be noted, first, the Italian colony at Vineland, N. J. These foreigners brought with them the knowledge of grape culture and wine manufacture; but afterwards, finding that truck farming and the cultivation of sweet potatoes were more profitable, the grape industry became a less important feature of the colony's activity.

Another colony of the same nationality, comprising about 500 persons, has flourished in Brazos County, Tex. There the industry is rice and truck farming. Throughout Texas there are many Italian cotton planters, as well as grape growers. In the Brazos County colony the inducement of cheap land was the cause of locating after the immigrants had finished work upon a local branch of a railroad, for the grading of which they had been imported. At Asti a colony of that name, on the cooperative plan, has been in very successful operation for fully 16 years. It is reported in the Italian Chamber of Commerce at San Francisco, that, of the 45,625 Italians living in 56 counties of California, almost all were engaged in agriculture; they owned 2,726 farm properties. In the vicinity of Denver and Pueblo, Colo., Salt Lake City, Utah, and Cheyenne, Wyo., truck farming has been quite generally in the hands of Italians. Likewise in the vicinity of New Orleans and at Memphis, Tenn., where there are 50 Italian truck farmers who emigrated from the valley of the Po, in northern Italy, and at Daphne, Baldwin County, Ala., there are regularly established sections or communities of foreigners engaged in agriculture. As a rule, the Italians take small tracts of land, and prefer to remain in close contact with neighbors of their own nationality. There are very few Italian farmers in the New England States.

Bohemians, though a rural people in Europe, have less frequently taken to the cultivation of the soil in the United States. The reasons assigned are, first, inadequate capital; second, cost of travel from the seaports to the interior, and, equally, the lonesomeness of farm life in comparison with the village life to which they have been accustomed in Bohemia. Bohemian farmers in individual households have,

however, been very prosperous in Ohio, Nebraska, Texas, and Wisconsin. They rarely come as farm laborers, but are prepared to buy land and develop it. A Finnish colony has been located in Hickman County, Tenn., with satisfactory results.

Attempts at inducing the Jewish portion of the foreign population to engage in agriculture have not been generally successful. The most favorable example is that at Woodbine, in the southern portion of New Jersey, below Camden. Difficulties of clearing land, unsuitable soil for certain crops, the lack of capital, and absence of markets here made themselves felt, until it was found necessary to supplement agriculture by the smaller manufactures, at which the population might occupy itself. At the present time 40 per cent of the 1,400 people at Woodbine are engaged in agriculture and 60 per cent in other pursuits. Russo-Jewish farmers in Connecticut have been especially successful, first, because of their taking farms already in a fair state of cultivation, and second, because of the favorable markets within easy reach. Likewise Jewish farmers have succeeded in the vicinity of New Brunswick, New Jersey, and other localities and adjacent cities clustered around the mouth of the Hudson.

In the several States foreign whites have made different degrees of progress and contributed variously to the agricultural development of the United States. A thriving colony of Swedes is established in a new township called New Sweden, in Aroostook County, Me. This started with 50 colonists directly from Sweden in 1870, and the community now numbers about 1,500 people of the most estimable character, residing in several townships of this county. Maine also has one or more small colonies of Finns, and a colony of Jews. In New Hampshire the advertisement of the 32,000 so-called abandoned farms in 1890 led to the arrival of a number of foreigners who became farm owners. In Cheshire County, Polish labor is the main reliance. There are also some French Canadians. Vermont is represented by Canadian French, Swedes, Norwegians, and Poles, especially during haying and harvesting. Scandinavian labor usually comes from Sweden and Norway direct. Laborers are engaged through employment agencies at the immigration station, in some cases by groups of farmers who divide them up among themselves in the busy seasons.

In Massachusetts the Poles have come in very rapidly in the past ten years, especially in the Connecticut Valley. In the market gardens around Boston many French Canadians are employed. In the Cape section Portuguese are abandoning fishing and going onto the farms. In Rhode Island conditions are somewhat similar to

those in eastern Massachusetts. In Connecticut the Irish of the second generation are farm owners, and the Italians, Swedes, and Poles perform field labor very satisfactorily. As a rule the Irish and Germans are among the independent farmers. In New York German and Dutch labor is quite common, while Poles, Swedes, Russians, and Hungarians are scattered in different sections. In New Jersey foreign farmers are mainly, as in Connecticut, Irish and German, while Italians are, as mentioned above, of increasing importance. In Pennsylvania the foreign population in agriculture is mainly German, but in the coal regions Poles, Irish, and Italians are gradually becoming a more important element in agriculture. In Ohio the prevailing foreign element is still German, especially in southern Ohio, and a high standard of educational attainment is frequently found among them.

In Indiana German farmers are noted in the southern counties, though there are few of this nationality in northern Indiana. Foreign farm laborers through central Illinois are usually Germans, Danes, and Swedes of a highly intelligent class. In Michigan there are many colonies of foreigners. Among them are to be noted the Dutch, Finns, Danes, and Norwegians. Germans are scattered over the State in smaller groups, and there are many French Canadians who came in originally as lumbermen. The sugar-beet industry has led to the arrival of Germans, Polanders, and Russians, who prove themselves most efficient. In Wisconsin Germans and Scandinavians have proved more successful than the American born as farmers. Most of the foreigners are Germans and Norwegians. Land companies have been quick to recognize this and have made special offers to induce immigration.

Polish people have been settled in the northern counties of Michigan under land-company auspices. These people have been brought principally from Indiana and the mining regions of Illinois and Pennsylvania. Another land company at work in settling the land in northern Wisconsin has sent 71 families into a single county, most of which were gathered from Western towns and the coal regions of Pennsylvania. Wisconsin, it is said, probably contains a greater variety of foreign groups than any other American State. Many of these groups occupy whole townships and control the entire social policy of these communities. The Germans, for example, number 75 per cent of the population of Taylor County, 65 per cent of Dodge County, and 55 per cent of Buffalo County. The Bohemians constitute three-sevenths of the population of Kewaunee County.

In Minnesota German farmers and farm laborers have been found to be most effective, but the various European nationalities are widely distributed, though not so numerously as in Wisconsin. Missouri includes among its foreign farmers Germans, Irish, Scandinavians, and French, representatives of which are found in many counties. In North Dakota foreign farmers are to be found in every agricultural county, representing as many as fourteen or fifteen different nationalities. In South Dakota conditions are very similar, especially in the northwestern part of the State. Foreign farmers and farm laborers are found everywhere in Kansas, Germans being most in evidence and Swedes next in order. In Ellis county it is said that more than one-half are foreigners, most of whom are Russians. A very large proportion of the land sales of the Union Pacific Railroad in this State was made to English, Swedish, Germans, and Russians.

Nebraska shows a variety of highly prosperous foreign farmers. The railroad companies sold largely to Germans, Swedes, Bohemians, and Russian Germans. The sugar-beet companies and the cattle companies employ large numbers of foreigners. In the Southern States the superabundance of cheap, unskilled labor has militated against the foreigners getting a foothold in agriculture. This is probably one main reason, if not the chief reason, for the failure of foreign whites to seek agricultural opportunities in the South. Furthermore, the absence of cash payment for wages is another drawback. Delaware furnishes an instance of many Germans who began as farm laborers, but are now independent farmers. While negro labor is principally employed, Germans and Swedes and other foreigners are frequently preferred, but are not to be had in sufficient numbers.

In Maryland special efforts have been made to induce foreign whites to take up land. As a result of this policy many families of Germans, Dutch, and Swedes have settled there. Many who came as laborers in a few years acquired land of their own, and are now prosperous farmers. In Virginia some Germans and English farmers have settled in Albemarle County, which is a well-known fruit section. Italians are found in large trucking districts near Norfolk. German colonists have been successfully engaged in agriculture at Ridgeway, N.C., for the past seventeen years. A colony of some 40 families, which settled near Morganton, in the western part of that State, has, after many struggles, attained to a highly creditable degree of prosperity. In Mississippi foreign farmers are mainly Germans and Swedes, with a few Irish. In Louisiana German farmers are credited with having first cultivated rice for commercial purposes. In some of

the southern parishes there are Germans, Italians, and Swedes engaged in farming, and Italians are numerous as farm laborers on large sugar plantations, to which they come annually during the busy season, both from Europe and from different parts of the United States.

In Texas the colonists located at Brunfels are especially remarkable in their influence over agriculture, inasmuch as in their methods of cultivation they have avoided the exhaustive system of farming and maintained the fertility of the soil as the fundamental principle of their farm policy. Much of the expansion in the trucking industry in the vicinity of San Antonio is due to these farmers. In Arkansas German farmers rank as first class. They have to be credited here with great skill as gardeners, truck farmers, and in diversified farming generally.

In Colorado Italians appear to be taking the lead in truck gardening in the vicinity of cities. In Arizona there are many Scandinavian farmers of considerable wealth. In Utah small farms, the feature of the State's agriculture, are owned by families that cultivate them. Many of these properties are in possession of English, German, Scandinavian, Swiss, and Dutch farmers, and here again the Italian truck farmers are prominent in the vicinity of the leading cities of the State. In Oregon in certain localities two-thirds of the farmers are Germans, though other nationalities, such as Scandinavians, Swiss, Dutch, English, Scotch, and Irish, are to be found. Many who started poor are now independent. Farm labor is mostly foreign. In California Germans and Swedes are found widely distributed. In Eldorado County, Cal., foreign farmers are mostly Portuguese and engaged in fruit growing.

IV. Progress in Agriculture

A. *Land Values, Equipment, and Number of Farms, 1850–1900* [1]

The half-century from 1850 to 1900 was one of rapid agricultural expansion. During that time millions of acres of wild lands were brought under cultivation, agricultural implements were improved, and markets brought closer together by improved means of transportation.

The census of agriculture of 1850 reported 1,449,073 farms, and that of 1900, 5,739,657, an addition in fifty years of 4,290,584 farms, or nearly three times as many as had been established in the preceding two hundred and fifty years of settlement. The same period wit-

[1] *Twelfth Census, 1900.* Agriculture (Washington, 1902), V, xvi, xviii–xix, xxi, xxiv–xxv, xxvii–xxxi.

nessed an increase in national population from 23,191,876 to 76,303,387, and in that of cities with 8,000 inhabitants and over, from 2,897,586 to 25,031,505. Notwithstanding this unprecedented growth in urban population, the increase in the number of farms was relatively greater than that in population, being in the ratio of 4 to 3.3. In 1850 there was 1 farm for every 16 persons in the United States; in 1900 there was 1 for every 13.3 persons. In proportion to population, therefore, there were 6 farms in 1900 where there were only 5 in 1850, representing an addition of 1 farm for every 12.4 persons added to the national population.

If only the population outside of cities with 8,000 inhabitants and over be considered, the following figures are obtained: In 1850 there was 1 farm for every 14 of the 20,294,290 persons composing this population, while in 1900, when the corresponding population was 51,271,882, there was 1 farm for every 8.9 persons. In proportion to the nonurban population, there were 7 farms in 1900 where there were only 4 in 1850, representing the establishment of 1 farm for every 7.2 persons added to the population outside of cities of 8,000 inhabitants and over Compared with the nonurban population there were nearly twice as many farms established during these fifty years as in the period between the settlement of Jamestown and the middle of the Nineteenth century. This large actual and relative increase in the number of farms since 1850 is a fact of great social importance, and is reflected in all the statistics of agriculture. . . .

The North Atlantic states, with the exception of Maine and Rhode Island, reported more farms in 1900 than ten years before. The gain in New Jersey was 12.4 per cent; in Massachusetts, 9.7 per cent; in Pennsylvania, 6.0 per cent; in Connecticut, 2.3 per cent; in Vermont, 1.6 per cent; in New Hampshire, 0.6 per cent; and in New York, 0.2 per cent. The number of all farms in the division increased 2.9 per cent, while in the preceding decade it decreased 5.4 per cent. Between 1880 and 1890 the number of farms decreased by 37,570, losses having occurred in every state in the division except Pennsylvania and New Jersey, leaving a net loss between 1880 and 1900 of 18,633.

In all the South Atlantic states, except Virginia and the District of Columbia, the number of farms reported has increased in every decade since 1850. The exception in the case of Virginia was caused by the formation from a part of its territory of the state of West Virginia in 1863. From 1890 to 1900 the per cent of increase in Virginia, West Virginia, and North and South Carolina was consider-

able. The rate of gain was smallest in Delaware, where it was barely 3 per cent.

The number of farms reported from the North Central division in 1900 was 14.2 per cent greater than in 1890. Each of the 12 states in that division showed an increase, the greatest percentages of gain being in North Dakota, Minnesota, Missouri, Michigan, and Wisconsin. In all these states, except Missouri, the increase was due principally to the opening of new farms on the virgin prairie, or on cleared forest lands. In Missouri the increase was largely caused by a sub-division of some of the large farms.

In the South Central division the number of farms added in the last ten years was twice as great as in the largest agricultural division, the North Central, and the per cent of increase in the former division was nearly four times as great as in the latter, and over twice that for the United States. As no farms were reported for Indian Territory in 1890, the per cent of increase in the decade can not be expressed for that territory. Among the other states and territories, the greatest percentages of gain are shown in Oklahoma, Louisiana, Mississippi, and Texas, in the order mentioned.

The number of farms has increased since 1890 in every state and territory in the Western division, the per cent of gain for the group being somewhat greater than that for the South Central. In this, as in the South Central division, a part of the increase marks the opening of new farms, and a part, the inclusion of the ranches using the public domain, which had not previously been enumerated as farms. It is impossible, from the data available, to determine the actual and relative increase in the number of separate agricultural establishments in the several states and territories of these two divisions. The publication, by states and territories, of the statistics of occupation and of tenure of farm families, as compiled by the population division, will furnish data for a trustworthy conclusion on this subject.

In 1850 New York reported 170,621 farms, the largest number of any state. Only two other states reported over 100,000. They were Ohio, 143,807, and Pennsylvania, 127,577.

In 1900 fifteen states reported over 200,000 farms, as follows: Texas, 352,190; Missouri, 284,886; Ohio, 276,719; Illinois, 264,151; Kentucky, 234,667; Iowa, 228,622; New York, 226,720; Georgia, 224,691; North Carolina, 224,637; Tennessee, 224,623; Pennsylvania, 224,248; Alabama, 223,220; Indiana, 221,897; Mississippi, 220,803; and Michigan, 203,261. . . .

From 1850 to 1900 the reported area of farm land increased from 293,560,614 acres to 841,201,546 acres. The new land opened for agricultural uses was 547,640,932 acres, or nearly twice as much as that converted from the wilderness into farms prior to the middle of the century. The improved land in farms, which was only 113,032,614 acres in 1850, advanced to 414,793,191 acres in 1900, an increase during the half century of 301,760,577 acres, which increase represents nearly three times the area under improvement in 1850.

The productive power of the farm naturally increases in proportion to the increase of its improved area. In 1850 the farms of the country not only supplied the people with food and with most of the raw material for clothing, but furnished also considerable quantities of products for export. Since that time the crop-producing area has increased so much faster than the national population that the country now supplies its people with more and better food and with more materials for clothing than ever before, and at the same time exports agricultural products to an extent that was impossible until recent years. . . . Had the area of improved land increased at no greater rate than the national population (229 per cent), it would have been only 371,877,300 acres, or 42,915,891 acres less than it actually is. All this surplus area is available for the production of food supplies for foreign nations; but, in fact, owing to improved methods of cultivation and to the occupation of more fertile soils, the exportations of agricultural products from this country have increased in even greater proportion, and now have an annual value nearly, if not quite, equal to one-half that of the total production of staples in 1850. This is evidenced by a comparison of the Treasury statement of exports in 1899 with the census crop report of 1849. . . .

AVERAGE NUMBER OF ACRES PER FARM, BY GEOGRAPHIC DIVISIONS: SUMMARY 1850 TO 1900

Geographic Divisions	1900	1890	1880	1870	1860	1850
The United States	146.6	136.5	133.7	153.3	199.2	202.6
North Atlantic	96.5	95.3	97.7	104.3	108.1	112.6
South Atlantic	108.4	133.6	157.4	241.1	352.8	376.4
North Central	144.5	133.4	121.9	123.7	139.7	143.3
South Central	155.4	144.0	150.6	194.4	321.3	291.0
Western	386.1	324.1	312.9	336.4	366.9	694.9

In all of the five geographic divisions, with the exception of the North Central, the increase since 1850 in the number of farms has been relatively greater than that in farm area, and consequently the average size of farms, with the exception above noted, has decreased during the same period. . . .

For the United States the average size of farms decreased from 1850 until 1880, since which year it has steadily increased. This was true, also, in the North Central and Western divisions, but in the North Atlantic states there was a decrease until 1890, a gain being shown for the last decade only. If, however, the farm acreage reported at the census of 1880 was, as has been estimated, approximately 2,500,000 acres in excess of the actual acreage, the average size of farms in this division was smallest in 1880 and the changes have been identical in time and character with those for the United States. In the South Atlantic division there was a constant decrease from 1850 to 1900, and in the South Central, from 1860 to 1890. The average for this latter group was greater in 1860 than in 1850, and in 1900 than in 1890. . . .

The value of farm property in 1900 was $20,514,001,838, a gain in ten years of $4,431,734,149, or considerably more than the total value reported fifty years before. The absolute increase in value for the last decade did not greatly differ from that for the ten years 1850 to 1860, which was $4,013,149,483, or from that for 1880 to 1890, which was $3,901,766,151. The percentages of gain for the three periods, however, were quite different, being for the decade 1850 to 1860, 101.2 per cent; 1880 to 1890, 32.0 per cent; and for the last decade, 27.6 per cent.

In the North Atlantic states the total value of farm property increased during each decade from 1850 until 1880, since which year it has decreased. The greatest increase reported was for the ten years from 1850 to 1860. This decade witnessed the largest per cent of gain in all the geographic divisions.

In the South Atlantic states there was an especially great increase from 1850 to 1860. Then followed the Civil War with its great destruction of farm property, and from this disaster most of the states did not fully recover before 1890.

The South Central states also suffered very severely from the Civil War, and notwithstanding the opening up of vast areas of new land, did not recover until 1890. The value of most of this new land was so low that the gain in the value of farm property during the last decade did not keep pace with the increase in farm area.

The North Central states have made large gains during each decade, and over one-half of the increase in the last fifty years in the value of all farm property has been in this division.

The Western states have made remarkable progress in each decade, the greatest gain, however, occurring in the period from 1880 to 1890.

The average value per acre of all farm property in the United States increased from $13.51 in 1850 to $25.81 in 1890. In 1900 it was $24.39, the decrease being due to the extensive additions of cheap land in the West and South, which more than counterbalanced the actual increase in value of the great majority of American farms. The average value for the South Central states reached its maximum in 1860, that for the North Atlantic and Western in 1890, and for the South Atlantic and North Central in 1900. . . .

The Twelfth Census reports a total capital of $9,874,664,087 invested in manufactures. Of this amount, $1,030,190,003 represents the value of land; $1,456,983,130, that of buildings; $2,559,766,383, that of machinery, tools, and implements; and $4,827,724,571, that of cash and sundries, including under this head raw materials, stock in process of manufacture, finished products on hand, amounts due from the sale of finished products, and cash on hand.

It is impossible to prepare a statement of the capital invested in agriculture to correspond exactly with the foregoing exhibit for manufactures, as the only forms of agricultural capital reported by the census are those which correspond to the fixed capital of manufactures, comprised in the first three items above mentioned and aggregating $5,046,939,516.

The fixed capital of agriculture, comprising the value of the land, buildings, and improvements, of implements and machinery, and of live stock, was valued, June 1, 1900, at $20,514,001,838, or more than four times that of manufactures. Judged by the standard of fixed capital, therefore, agriculture leads manufactures by a ratio of more than 4 to 1.

Corresponding to the "live capital" of manufactures, included under the head of "cash and sundries," are the value of all farm products on hand June 1, 1900, the money due from their sales, the value of the growing crops of the year 1900, and the cash on hand and such cash in bank as is kept for use as supplementary capital in farming operations, but not permanent investments either in bank or in industries other than agriculture. These items have an enormous aggregate value, of which no definite statement can be made. It

does not, however, constitute as large a per cent of the total farm capital as the "live capital" forms of the total invested in manufactures.

But even if this "live capital" were to be wholly disregarded and comparisons were to be made between the fixed capital of agriculture and the total capital, both fixed and live, of manufactures, investments in agriculture would still be more than twice as great as in manufactures. If conservative estimates of the "live capital" of agriculture be included, it is found that the industry has a total investment perhaps two and one-fourth times as great as that in manufactures. In either case, judged by investment, agriculture still leads manufactures by a wide margin. . . .

In the decade from 1860 to 1870 the Civil War directly and indirectly wrought great changes in the agriculture of the country. The organization of great armies increased the market demand for food products in the North. The supply of labor was diminished, for the time being, but was increased later by the great immigration movement that had begun in the preceding decade. Agricultural production in the North was greatly extended, and land values continued to rise. Thousands of miles of railroad were constructed, and the Union Pacific, completed in 1869, opened a new pathway to the Pacific coast. The passage of the homestead law in 1862, granting land to the actual settler on the public domain, made it easier for all, and especially for those having little or no capital, to obtain farm homes, and improving transportation facilities made agriculture on the new farms profitable.

As a result, many persons, and especially soldiers of the Northern Army, moved at the close of the Civil War from the East to the West. Land values in that section advanced more rapidly than elsewhere. In fact, the westward movement of the younger farmers and the increasing competition of the cheaper and more fertile grainfields of the West, caused land values in some parts of New England to suffer a slight decrease. The growing demand for American breadstuffs and meat products in Europe checked, for a time, the tendency toward further decrease in land values in the East by maintaining high prices for agricultural products in all parts of the country. The extent of that demand and its influence in stimulating production and settlement in the West, and its temporary influence in the East, are shown by the fact that agricultural exports increased from $256,560,972 in 1860 to $361,188,483 in 1870, although by 1870 cotton exportation had not attained the proportions which were reached a little later.

The conditions in the South in this decade were radically differ-

ent from those in the North. As a result of the war, the markets of the South were destroyed, investments in slaves were lost, and land improvements deteriorated. The close of the war found the planters bankrupt, their credit destroyed, and agriculture and all business paralyzed by lack of working capital. Vast areas of land went out of cultivation, the reported acreage of farm land in all the Southern states was less in 1870 than in 1860, and the total and average values of land everywhere decreased.

The inflation of the currency during the war affected values expressed in paper money, exaggerating advances and concealing declines. The real change during the decade is therefore better indicated by comparing the gold values of 1870 with those of 1860. The average increase in land values in the North Atlantic, North Central, and Western divisions was over $5 per acre, while in the two Southern divisions there were decreases of from $3 to $5 per acre. . . .

With the readjustment which took place during this decade in the labor conditions of the South, agricultural operations in that section began to assume their old proportions. The growing demand for cotton in the factory centers of the world stimulated its cultivation, and soon resulted in a great increase in production. The extent and rapidity of the recovery from the condition of demoralization following the Civil War are shown by the fact that, while in 1860, the last year of uninterrupted slave labor, 5,387,052 bales of an average weight of 445 pounds were produced, in 1880 the product was 5,755,359 bales of an average weight of 453 pounds. The reestablishment of Southern agriculture on a solid basis assisted in restoring the values of the old farm lands of the South.

The increased demand for cotton resulted in a great movement of population from the South and elsewhere to the new cotton lands of Texas and the Southwest. Large areas were settled, and land values advanced there as in the South and West.

The growing European demand for American beef, and the increasing consumption of wool in American factories, encouraged the keeping of live stock on the public domain of the West, and especially in Texas. Steers and sheep began to take the place of buffaloes, and the rapid development of the range industry assisted in enhancing the value of the Western farm lands reported by the census of 1880.

The panic of 1873, brought about by the excessive construction of railroads and by over speculation, checked many lines of industry, and for want of remunerative occupations in the towns

and cities a proportionally greater movement of population toward the farming sections followed. The panic resulted in the reorganization of many railroads, and in lower transportation rates, which in turn assisted in encouraging settlement on the new farm lands of the West.

During this decade, the cost of transporting agricultural products from the West to the seaboard constantly decreased, and the competition between the cheap, fertile prairies of the West and the less productive lands of the East became very apparent. The grain-raising sections of the East suffered most, and land values declined there, while in the West they greatly increased. Sections of the East devoted to dairy farming, market gardening, and fruit growing suffered less, as it was impracticable, except during a limited portion of the year, to bring the products of these industries from the Western states and deliver them in good condition in Eastern markets.

In this decade, then, land values in the South advanced, and the effects of the Civil War were partially overcome; there was a still greater advance in the North Central and Western states; but the East began to be adversely affected, and in many sections there was a marked decline in the average as well as the total value of farm lands. . . .

In 1850 only eight states reported farm land to the value of $100,000,000 or over. They were: New York, $554,546,642; Pennsylvania, $407,876,099; Ohio, $358,758,603; Virginia, $216,401,543; Kentucky, $155,021,262; Indiana, $136,385,173; New Jersey, $120,237,511; and Massachusetts, $109,076,347.

In 1900 there were seven states with land values of over $800,000,000, as follows: Illinois, $1,765,581,550; Iowa, $1,497,554,790; Ohio, $1,036,615,180; Pennsylvania, $898,272,750; New York, $888,134,180; Missouri, $843,979,213; and Indiana, $841,735,340. . . .

The values of farming implements on hand at the date of census enumeration increased in each decade since 1850 in the North Atlantic, North Central, and Western divisions, while in the South Atlantic and South Central states they showed a tremendous decline in the decade 1860 to 1870, again reflecting the disastrous effect of the Civil War. The percentages of increase in the North Atlantic and North Central divisions were least for the decade 1880 to 1890, and in the Western states, for the decade 1890 to 1900. In the Civil War period the value of farming implements and machinery in the South Atlantic states declined $14,020,511, or 41.2 per cent, and in the South Central, $31,435,478, or 51.3 per cent. After 1870 the val-

ues increased in both divisions, but not until 1890 did the aggregate of such gain suffice to give the South Atlantic division as large a reported value of this class of farm property as it had in 1860; and in the South Central states, notwithstanding the great growth of population, the farmers did not, until 1900, report as large investments in machinery as they did prior to the war. . . .

The five states with the highest values of farming implements and machinery reported in 1900 were Iowa, with $57,960,660; New York, with $56,006,000; Pennsylvania, with $50,917,240; Illinois, with $44,977,310; and Ohio, with $36,354,150. The highest averages per farm were reported by Hawaii, District of Columbia, Nevada, North Dakota, California, Montana, New Jersey, and Iowa, in the order named; and the highest averages per acre, by the District of Columbia, Hawaii, Alaska, New Jersey, Massachusetts, and Rhode Island.

For the United States the value of machinery per acre of farm land has increased since 1850 from $0.52 to $0.90, or nearly 80 per cent, and since 1880 from $0.76 to $0.90, or about 20 per cent. These increases in money value, however, do not measure the added usefulness of the new machinery. That is measured principally by the degree to which the machinery saves human labor by substituting the power of animals or of steam. It is interesting, therefore, to inquire what changes have been made in the past fifty years in the use of animal power on farms in connection with these new machines. A comparison of human and animal labor on farms in relation to the acreage of crops cultivated can be made only for the period since 1880.

B. *Importance of Irrigation, 1899*[1]

The importance of irrigation to agriculture and the extent to which it was proposed to carry it on by the government were shown to be in 1899 as follows:

Testimony given before the Industrial Commission shows that irrigation by English-speaking people in the United States began half a century ago among the Mormons in Utah and at scattered points near the mining districts in California. Twenty years later it was adopted at separate places in Colorado and adjacent States and Territories. It is estimated that 40 per cent of the United States proper requires irrigation for successfully producing plants useful as a food supply for man and animals. In 1890 a little over three and

[1] *Final Report of the Industrial Commission* (Washington, 1902), Volume XIX of the Commission's Report, 1073–6.

one-half million acres were cropped by irrigation, and in the succeeding ten years this area has been doubled, largely by the more careful use of water and more complete tilling of farms already partly irrigated. Since 1895 there have been comparatively few notable works of irrigation built, and development along this line may be said to have nearly ceased. This cessation of activity in irrigation development is not because there is no longer water or fertile land, but because, as before stated, the easily available waters are already utilized, and it has not been found profitable to store floods nor to construct large works by private enterprise, any more than it would be profitable for individuals to dredge harbors or build light-houses. Moreover, it must be borne in mind, not only is it important that an ample supply of water for irrigation shall be secured and controlled, but also that it shall be stored for use when most needed and when the most remunerative crops can be obtained. Sugar beets, potatoes, alfalfa, and orchards, all require irrigation in August and September, which is the season of least supply. These crops require, as a rule, but little water, while yielding large returns. . . .

Briefly summarized, therefore, it may be stated that the agricultural interests of sixteen States and Territories of the West depend directly, in part at least, upon irrigation and irrigation methods. These States and Territories are Arizona, California, Colorado, Idaho, Kansas, Montana, Nebraska, Nevada, New Mexico, North Dakota, Oklahoma, Oregon, South Dakota, Utah, Washington, and Wyoming. They comprise an area of nearly 1,500,000 square miles, almost one-half the area of the United States proper, and support a population of about 6,000,000 of people.

This large district, extending from the Gulf of Mexico (for a large section of Texas may be included) to the Canadian border, and practically from the Mississippi to the Pacific, constitutes what is known as the arid or semiarid districts of the West. Into this territory railroads penetrated far in advance of population. Those who entered into the migratory movement westward during the seventies and early eighties took up a portion of this land, only to learn that the water supply thereof was insufficient to rely upon for profitable cultivation. After occupation for some time, much of it was given up entirely, public buildings were abandoned, and whole communities disappeared from the towns they had built. In other sections attempts at irrigation, more or less successful, were made, and millions of acres thereby reclaimed to civilization.

In many of these States the production of foodstuffs has not

reached the point of supplying the home demand, arising largely from the development and progress of mining and other local industries. Extension of food production must come through irrigation, or not at all. . . .

But the benefits of irrigation are not confined to the arid regions of the West. In sections of the country East and South it has been gaining ground as a feature of agriculture in the growing of high-priced products. A regular water supply is a necessary condition in order that dry seasons may not destroy the outlay of the producer. In Connecticut, Massachusetts, and New Jersey irrigation has made the growing of small fruits highly profitable. The possibilities of its application to market gardening are almost unlimited. In Wisconsin irrigation has been used for cranberry growing and for obtaining a setting of sod on the sandy pine lands. Tobacco growers in Connecticut are likewise using irrigation. In southern Louisiana and southern Texas the area of rice culture has been extended in some cases as much as fourfold within a year or two. Water is pumped into the canals for the purpose. Hundreds of wells are being sunk in Louisiana for the rice fields. The older methods of rice culture, such as have prevailed in the Carolinas, are giving place to the newer systems, based on irrigation and the use of improved harvesting machines. Thus the widening of the irrigated area not only increases the sum total of national products, but extends the home market for manufactures.

C. *Dry Farming, 1905* [1]

Hand in hand with irrigation has gone dry farming. Both are the result of a scarcity of rainfall in a great area of the west. In 1905 an expert directed attention to the importance of this method of farming as follows:

Between the line of 20 inches average annual rainfall and the Rocky Mountains there is a strip of land reaching from Canada to the Gulf of Mexico, embracing about 300,000,000 acres, which for agriculture is debatable ground. . . . Together they present one of the greatest problems of American agriculture. The area is great, the soil is deep and exceedingly fertile, and the climate healthful and agreeable aside from lack of moisture. Men need it for homes. All interests are eager to see these areas settled, provided the settlers can be self-supporting, or to avert this if settlement is to mean disaster. From all classes come the questions: What methods will make the most of

[1] *Yearbook of the Department of Agriculture, 1905* (Washington, 1906), 423–7, 430.

these lands? How can they be made to support the largest number of people and give them the greatest measure of human comfort?

There is a variety of causes tempting men to plow up the native sod. The stockman realizes the need of a reserve food supply and seeks to provide it by growing Kafir corn, sorghum, rye, hay, and other drought-resistant forage crops. The eastern farmer finds these broad, rolling plains, with their fertile soil and freedom from rocks or stumps, attractive. Hopeful, enterprising men are prone to believe that settlement and cultivation will change the climate, and a few wet years are almost certain to create a wave of settlement.

EARLY FAILURE AND ITS LESSONS

The first general attempt of this kind began in 1883. Western Kansas and Nebraska were dotted with farmhouses. Eastern Colorado was largely settled up between 1886 and 1889. A few wet years, in which fine crops were grown, were followed by a succession of dry seasons. On millions of acres crops shriveled and died, men lost hope and energy through repeated bitter failures, and women and children endured dreary years of poverty and hardship. Homes which represented the savings of a lifetime had to be abandoned. Whole counties were almost depopulated. What had been thriving towns were deserted.

The bitter lessons of this failure lasted for years, but its scars at length healed. Other influences were meanwhile at work to restore confidence in ability to farm this region. As a result, another wave of settlement is sweeping over these plains. Other settlers are buying the abandoned farms. Deserted towns are being rebuilt and new ones laid out. This latest attempt is not, however, a repetition of the first. New methods are being tried. Much has been learned in past twenty years. Practically every settler who has remained in the semiarid belt has been an experimenter in developing a kind of agriculture suited to this climate. . . .

The agricultural problems of the semiarid region relate to heat and moisture. There is no lack of fertility. The average rainfall, which varies from 20 inches on the eastern margin of the semiarid district to 10 inches on the western, is not simply scanty, it is irregular. . . . There are years when the average is almost cut in two, and there are months without a cloud and days, especially in the Southwest, when the winds are like a blast from a furnace — so hot and dry that they change green fields of corn into dry and rattling stalks in twenty-four hours. . . .

In order to lessen the losses in dry years and to extend farming beyond the point where the rainfall of a single year is sufficient to grow crops, summer fallowing is employed. The ground is plowed, pulverized, and kept free from crops or weeds, the main purpose being to lessen evaporation and save the moisture falling on the soil from one year to the next. Thus when a crop is planted on this land the following year, two seasons' rainfall is utilized to grow one crop. Special tools and methods of cultivation have been devised to lessen the losses by evaporation from the summer-fallowed fields and remarkable results have been achieved, but a summer-fallowing will answer for annual crops only. It will serve to grow wheat and many of the drought-resistant crops that are now a feature of the dry farm, but will not answer for trees, and in many cases it will not answer for alfalfa. Trees, small fruits, or alfalfa can not be moved each year from the summer-fallowed to the nonsummer-fallowed field. For these the dry farm provides no method of tiding over the seasons when a dry winter is followed by a dry spring and when the soil moisture falls below the needs of plant life. If these are to be features of the dry farm, the additional water supply which is necessary to maintain continuous growth must be furnished by irrigation. Nor do the most sanguine expectations of the effectiveness of dry-farming methods justify belief in immunity from drought, even with the best methods or safest crops. . . .

But when all this has been said the fact must be recognized that the dry farm taken alone has not the attraction or the security of farming under irrigation, or of farming in Iowa and Illinois, where the rainfall is ample. Nothing can be more dreary or discouraging than the aspect of the dry farmer's home in midsummer. Without shade trees, without green grass, without fruit, the dead, dusty, and lifeless appearance of the landscape is monotonous beyond measure. It makes one realize that "a world without turf is, indeed, a desert." The fact that many of these farmers are prosperous does not remove the need for trees, fruit, grass, and gardens, nor lessen the value of these features of a home as seen on irrigated farms in the same region. The dry farm needs enough irrigation to provide these things. It needs it for the comfort of the family. It needs it for the opportunities it will give to make a living in dry years, as well as larger profits in wet ones, and it is only by supplemental irrigation that the limits of settlement can be pushed westward across the driest part of the semiarid belt. The present situation requires that the chances of failure be clearly faced, and it is the writer's conviction that there are

hundreds of settlers in the western half of the semiarid belt who must supplement the dry farm by irrigation; and unless they do, the next period of drought will witness a greater exodus and more hardship and privation than the first.

V. Southern Agriculture

Tenancy, Size of Farms, and Character of Crops, 1850–1910[1]

The Civil War and its results caused radical changes in southern agriculture, the most important of which was the readjustment of land tenure. Many of the large plantations, which had formerly been worked by slaves, were broken up and rented or sold to the freedmen. In either case the change was radical, but the question of tenancy has been the most important.

Previous to the Civil War there were many large farms in the South which were mostly worked by slave labor. These were ordinarily called plantations. There was no sharp line of distinction at that time, nor is there at present, between plantations and other farms, the term "plantation" being applied simply to large farms usually comprising several hundred or even thousands of acres. Prior to the war each plantation was, of course, a single agricultural unit and was so reported by the census, being counted as one of the farms of the country.

During the period of reconstruction after the Civil War the owners of the plantations largely tried to work them by hiring labor. A movement soon began, however, for the substitution of the tenant system of operation. Under this system a plantation was sub-divided into small tracts — commonly called "parcels" or "cuts" — each of which was operated by a tenant. The tenants were designated by various terms, such as "cropper," "standing renter," and the like.

Since there were considerable numbers of tenant farms in the North as well as in the South, the Census Bureau very naturally adopted the practice of treating the tenant farms in the South in the same manner as those in the North; that is to say, each tract of land operated by a tenant was treated as a separate farm. As a matter of fact, however, a large proportion of the tenants in the South actually occupied a very different economic position from that usually occupied by tenants in other parts of the country. The plantation as a unit for general purposes of administration has not disappeared, and in many cases the tenants on plantations are subjected to quite as complete supervision by the owner, general lessee, or manager as

[1] *Thirteenth Census, 1910.* Agriculture (Washington, 1913), Vol. V, 877–8.

that to which the hired laborers are subjected on large farms in the North and West. Where this is the case a tenant is very similar in his economic position to the hired farm laborer, practically the only difference being that he confines his work to a particular parcel of land which he works by himself and that he is paid by a share of the crop instead of by wages. There are also some plantations in the South which are operated by hired labor. The distinction drawn in popular speech is still based on the size of the agricultural unit and not on the form of organization. . . .

From what has been said it is evident that the statistics of agriculture for the South, when each tenant holding is treated as a separate farm, are in some respects not comparable with those for other parts of the country. In the North and the West a tenant farm is very similar in its method of operation to a farm operated by the owner himself. The owner ordinarily exercises very little supervision over the operations of the tenant, and the latter has substantially an independent economic status. Tenant farms in the North and West are in general quite as large as the farms operated by their owners, and the tenant farmer often employs hired labor to assist him. In the South, on the other hand, a very large proportion of the tenant farms are decidedly small, containing no more land than can be effectively worked by the tenant alone, with perhaps the assistance of his own family. Moreover, many, though not all, of the tenants are subjected to very thorough supervision by the owner or manager of the plantation of which the farm is a part. As the result of this difference in conditions, the average size of farms in the South, when each separate tenant farm is counted as a unit, is very much less than in the North or the West, and the statistics give an impression which does not correspond to actual conditions. . . .

During the half century between the census of 1860, the last census before the process of breaking the plantations up into tenant farms commenced, and that of 1910, the amount of land in farms in the 11 Southern states increased only 43.3 per cent, while the number of farms, as returned by the census, increased from somewhat more than half a million to about two and a half million, or 353.7 per cent. In 1860 the average farm contained 365.1 acres, of which 103.5 acres were improved, and the average value of land and buildings per farm was $3,370. In 1910 the average farm had decreased in size to 115.3 acres, of which 43.8 acres were improved, the average value of land and buildings being $2,172. In the East South Central and South Atlantic divisions the average total acreage in 1910 was

materially lower than that for all of the states . . . , the latter being increased by the presence of many very large ranches in the West South Central division. . . . [There has also] been a continuous decline since 1860 in the average size of farms in the plantation districts, the greatest decrease taking place between 1860 and 1870.

The effect of the method of classifying farms in the South is further shown in [the following table] by a comparison of the average total and improved acreage and value of land and buildings for that section with the corresponding averages for the North.

CENSUS YEAR	AVERAGE ACRES OF LAND PER FARM		AVERAGE IMPROVED ACRES PER FARM		AVERAGE VALUE OF LAND AND BUILDINGS PER FARM	
	The South	The North	The South	The North	The South	The North
1910	114.4	143.0	48.6	100.3	$2,374	$8,182
1900	138.2	133.2	48.1	90.9	1,251	4,190
1890	139.7	123.7	58.8	87.8	1,402	3,721
1880	153.4	114.9	56.2	76.6	1,224	3,314
1870	214.2	117.0	69.2	69.2	1,456	3,463
1860	335.4	126.4	101.3	68.3	3,455	3,180
1850	332.1	127.1	101.1	65.4	2,051	2,380

VI. Farms and Farm Property and Crops

A. *General View, 1910* [1]

The decade from 1900 to 1910 saw a remarkable development in American agriculture, particularly in the value of farm products and of farm property. This development is indicated in the Thirteenth Census as follows:

There were in the United States at the time the census enumeration was made 6,361,502 farms, containing 878,798,325 acres, of which 478,451,750 acres were improved, the remaining 400,346,575 acres comprising the acreage of woodland and other unimproved land. Of this latter acreage, 190,865,553 acres were reported as woodland and 209,481,022 acres as other unimproved land. The land in farms

[1] *Thirteenth Census, 1910.* Agriculture (Washington, 1913), Vol. V, 27–9, 33–4, 37, 43–4.

represented 46.2 per cent, or somewhat less than one-half of the total land area of the country. The improved land, which formed more than one-half (54.4 per cent) of the farm land, represented only about one-fourth (25.1 per cent) of the total land area of the country. The average size of a farm was 138.1 acres, of which on the average 75.2 acres were improved and 62.9 acres unimproved. . . .

It is a significant fact that whereas the total population increased 21 per cent between 1900 and 1910, the population of the territory which was classed as urban in 1910 (that is, resident in places having at that census 2,500 or more inhabitants) increased 34.8 per cent during the decade, and the population of the territory classed as rural in 1910 increased only 11.2 per cent. It will be noted that the rural population, under the census classification, includes much more than the agricultural population, and it is probable that the agricultural population increased even less rapidly. Indeed if the census distinction of urban population were drawn at incorporated places of 1,000 inhabitants or of 500 inhabitants the rate of increase in "rural" population would probably be less than 10 per cent. The number and acreage of farms increased much less rapidly than the total population, but the growth in the number of farms, 10.9 per cent, nearly kept pace with the increase of the rural population, 11.2 per cent. The total farm acreage, on the other hand, increased only 4.8 per cent. This, however, is less significant than the increase of 15.4 per cent in the improved farm acreage, which still fell appreciably below the increase in total population. . . .

The small increase in the total farm acreage was partly due to changes in conditions under which land was held. Not all land reported as in farms is in any true sense used as farm land. In some cases considerable amounts of land formerly owned by farmers but not found immediately available for agricultural purposes have since been purchased for speculation, and although reported as in farms in 1900 were not so classified in 1910. On the other hand, in some cases large stock ranches which as entireties were reported as "farms" in 1900 have since been partly divided into smaller farms and partly left unused for agricultural purposes. The formation of forest reserves and the purchase of large tracts of land by wealthy citizens for country homes have also tended to keep farm acreage from increasing rapidly. . . .

That the number of farms increased more rapidly than the acreage of land in farms is accounted for partly by the fact that in some sections of the country considerable numbers of small truck, poultry, and

fruit farms have been established, but still more by the fact that in the West large numbers of farms of moderate size have been established where great cattle ranches were formerly found. Then, too, in the Southern states the subdivision of many plantations into smaller tracts of land operated by tenants — a process begun soon after the Civil War — has continued, each of such tracts counting as a farm under the census definition. . . .

The total value of all farm property in 1910 reached the enormous sum of $40,991,449,000, of which over two-thirds (69.5 per cent) represented the value of land, somewhat less than one-sixth (15.4 per cent) the value of buildings, and about the same proportion (15.1 per cent) the value of the equipment. The value of land formed an appreciably larger proportion of the total value of farm property in 1910 than in 1900. The total value of farm property a little more than doubled during the decade 1900–1910. The greater part of this extraordinary increase was in the value of farm land, which increased no less than 118.1 per cent. This latter increase was largely due to the advance in the selling price of land, the average exchange value per acre being more than twice as high in 1910 as in 1900 — $32.40 as compared with $15.57. There were remarkable increases also in the value of farm buildings and equipment during the decade, the value of buildings having increased 77.8 per cent, that of implements and machinery 68.7 per cent, and that of live stock 60.1 per cent. These increases were due in part to higher prices of building materials, implements, and farm animals and do not represent correspondingly great additions to physical property.

In spite of the decrease in the average size of farms, from 146.2 acres to 138.1 acres, the value of all farm property per farm increased from $3,563 in 1900 to $6,444 in 1910, or 80.9 per cent. The average value per farm of each class of property increased materially, but the largest increase was in the value of land, from $2,276 per farm in 1900 to $4,476 in 1910.

The average value of all farm property per acre of land in farms increased from $24.37 in 1900 to $46.64 in 1910, a gain of 91.4 per cent. The investment of farmers in buildings and equipment is chiefly utilized in connection with improved land. The average value of buildings per acre of improved land was $13.22 in 1910 as compared with [$]8.58 in 1900, while for equipment the corresponding averages were $12.94 and $9.23, respectively. . . .

In each of the three geographic divisions in the territory north of the Ohio and east of the Mississippi — New England, Middle At-

lantic, and East North Central — there was an actual decrease in the number of farms between 1900 and 1910, despite the large increase in population, which was chiefly in urban communities. In the West North Central division the increase in the number of farms was comparatively small, amounting to only 4.6 per cent, although sufficient to bring about a small increase for the North taken as a whole. In all of the other five divisions there was a very considerable increase in the number of farms. In the East South Central and Mountain divisions the per cent of increase in the number of farms was greater than that of the total population.

The changes in the number of farms in the various divisions of the country, as in the United States as a whole, in most instances followed the movement in the rural population more closely than that of the total population. This is especially noticeable in the West South Central division, where the increase in the number of farms exceeded that for any other division, and where the percentage of increase, 24.9, shows a fairly close correspondence to that for the rural population.

Great differences appear among the several geographic divisions with respect to the changes in the total acreage of land in farms between 1900 and 1910. In the New England, Middle Atlantic, South Atlantic, and West South Central divisions there was a decrease in the acreage reported in farms. The largest decrease, both in absolute amount and in percentage, was in the West South Central division, but this is in fact more apparent than real. A considerable increase in the acreage of farms occurred in two of the states of this division — Arkansas and Oklahoma. In Louisiana a moderate decrease appeared, due to the fact that much undeveloped land in the extreme southern part of the state, which, although not actually used for agriculture, had been reported as in farms in 1900, was subsequently purchased by nonresidents and was not reported as farm land in 1910. In Texas there was nominally a very great decrease in the acreage of farm land, but a large part, if not all, of this decrease was due to the fact that in 1900 the state contained many enormous ranches which in their entirety were reported as farm land, whereas in 1910 many of these ranches had been divided into smaller tracts, some of which were reported as farms, while others not being actually in use for agricultural purposes, were omitted from the reports. Some large tracts of land, which were owned by nonresidents and not used at the time of the enumeration in 1910, had been used more or less for grazing in 1900 and were reported at that

time as in farms. The acreage of improved land in Texas increased greatly during the decade.

The largest absolute increase in the acreage of farm land between 1900 and 1910 occurred in the West North Central division, which at both censuses comprised a larger area of farm land than any other, the advance being from slightly more than 201,008,713 acres in 1900 to 232,648,121 acres in 1910, or 15.7 per cent. The highest rate of increase was in the Mountain division, 28.3 per cent.

The farm acreage in the North as a whole increased 8 per cent and that in the South decreased 2.1 per cent, chiefly because of the conditions in Louisiana and Texas as mentioned above. In the West, notwithstanding the large increase in the number of farms, the gain in farm land was but 18.2 per cent, but the fact that the gain was not large is partly due to conditions similar to those in Texas.

. . . [I]n the New England, Middle Atlantic, and East North Central divisions, every state except Michigan and Wisconsin shows a decrease between 1900 and 1910 in the land in farms, and in these two the gains were of small importance. The most notable increases were in three contiguous states of the West North Central division, namely, North Dakota, South Dakota, and Nebraska. In the West South Central division Oklahoma shows a conspicuous increase, and in the Mountain division, New Mexico.

The largest absolute gain in the improved land in farms between 1900 and 1910 occurred in the West North Central division — from 135,643,828 acres to 164,284,862 acres, the rate of increase being 21.1 per cent. Notwithstanding the nominal loss in total acreage of farm land in the West South Central division, the improved land showed a large gain — 18,493,743 acres, or 46.5 per cent. Moreover, in the South Atlantic division, although there was a loss in total acreage of farm land, the gain in improved acreage was 5.2 per cent. The highest percentage of gain was in the Mountain division — 89.4 per cent. Decreases in improved acreage appeared in the New England and Middle Atlantic divisions, these decreases being relatively greater than those in the total farm acreage. The East and West North Central divisions, on the other hand, show a greater relative increase in improved than in total farm acreage. Despite the slight decrease in the total farm land in the territory east of the Mississippi, there was a gain of 2.8 per cent in the improved acreage. In the territory west of the Mississippi, however, nine-tenths of the total increase in the improved farm acreage of the country occurred, the rate of increase for this section being 28.6 per cent.

Among individual states North Dakota showed the greatest absolute increase in improved farm acreage during the decade, gaining 10,810,572 acres. The only other states where more than 2,000,000 acres were added to the improved farm land were Oklahoma, Texas, Nebraska, Kansas, South Dakota, Washington, and Colorado. The highest percentage of increase — 348.9 — was shown for New Mexico, followed by North Dakota, Montana, and Oklahoma, in each of which the improved land more than doubled. . . .

The average size of farms is smaller in the older sections of the country than in the newer, and in general, for reasons explained below, it is smaller in the South than in the North. More specifically, the average size of farms in 1910 was smallest in the East South Central division, being only 78.2 acres. It was 92.2 acres in the Middle Atlantic division; 93.3 in the South Atlantic; 104.4 in New England; and 105 in the East North Central division. These five divisions do not differ so widely from one another as they all do from the four divisions lying west of the Mississippi River, in each of which the farms averaged much larger, ranging from 179.3 acres in the West South Central to 324.5 acres in the Mountain division. Among the individual states the average size of farms was greatest in Nevada, Wyoming, and Montana. In these states there are still many great cattle and sheep ranches which are reported as single farms, thus materially increasing the average size. North and South Dakota ranked next to these three states, but the high averages for them is largely due to a different cause. Most of the farms in these states were acquired under the homestead and other land laws, and a large proportion of the settlers secured as much as 320 acres of land. A further contributing cause is the large number of great wheat farms in these two states. . . .

In the South there are many plantations, some of very large acreage, which have been divided into small parcels of land of from 20 to 80 acres, each leased to a tenant. The operations of the tenants are often so completely supervised by the owner that the plantation is virtually a single agricultural unit, but in the census statistics the land operated by each tenant is classed as a farm. There are also in the South, however, large numbers of rented farms, the tenants of which are substantially independent in their management. The independent tenant system of the South is more or less like the tenant system of the North and West, but there is little similarity between it and the plantation tenant system. The plantation operated by

tenants, is, in many respects more like the large northern farm operated with hired labor or wage hands. . . .

Among the various states, Illinois with $120.08 per acre and Iowa with $110.40 per acre, reported the highest average value of all farm property per acre of farm land in 1910, while New Mexico reported the lowest, $14.15. These states ranked the same with respect to average value of land alone per acre, the amounts being $95.02, $82.58, and $8.77, respectively. In the average value of buildings, however, as well as in that of implements and machinery, New Jersey ranked first, with Wyoming lowest in respect to average value of buildings, and New Mexico lowest in respect to average value of implements and machinery. In the average value of live stock per acre, Arizona and Iowa, in the order named, outranked the other states (not counting the District of Columbia), while North Carolina had the lowest average. In Arizona, however, as in certain other Western states, live stock is largely pastured on public lands and a comparison of the value of live stock with the acreage of land in farms has little significance.

The southern divisions of the country in general showed greater percentages of increase in the value of all farm property per acre of farm land during the decade 1900–1910 than the northern divisions. The West South Central division outranked all others in this respect, with an increase of 147.2 per cent. The two most westerly divisions, the Pacific and Mountain, ranked second and third, respectively, in percentages of increase, followed by the South Atlantic and the West North Central. In all five of the divisions just named the average value of all farm property per acre of land was more than twice as high in 1910 as in 1900. The lowest rate of increase, 33 per cent, was in the Middle Atlantic division. . . .

The principal factor in the increase in the average value of farm property as a whole per acre of land in farms has been the increase in the average value of land per acre. . . . In five of the nine geographic divisions, namely, the four west of the Mississippi River together with the South Atlantic, the average value of land in farms per acre was more than twice as high in 1910 as in 1900; and in the Mountain division it was more than three times as high. In the East North Central and East South Central divisions the increase in value of farm land per acre exceeded 75 per cent. The lowest percentages of increase were in the Middle Atlantic and New England divisions, being 24.5 per cent and 40.5 per cent, respectively.

In the United States as a whole, and in most of the divisions,

the relative increase during the decade in the average value of buildings, implements and machinery, and live stock per acre of land in farms was much less than the increase in the average value per acre of the land.

The highest rates of increase in the average value of buildings per acre were in the West South Central division, 132.4 per cent; the Mountain, 106.8 per cent; the South Atlantic, 97.6 per cent; and the Pacific, 89.9 per cent. In every state the average value of buildings per acre of land in farms was higher in 1910 than in 1900; in Arizona and Oklahoma it was more than three times as great; and in 16 other states it was more than double.

B. *Distribution of Leading Crops, 1909* [1]

The leading agricultural crops in 1909 were corn, wheat, cotton, hay and forage, oats, vegetables, fruits and tobacco. Illinois led the states in the value of all farm products, after which came Iowa, Texas, Ohio, Georgia and Missouri:

A rapid characterization of the agriculture in the three great sections of the country may be expressed as follows: In the North the leading crops, in order of value in 1909, were corn, hay and forage, wheat, and oats; in the South they were cotton, corn, vegetables, and hay and forage; and in the West, hay and forage, wheat, fruits and nuts, vegetables, and oats. In each of the three sections the crops named together constituted about four-fifths of the total value of the crops produced in 1909.

Cereals contributed more than one-fourth of the total value of crops in all the divisions except New England where they formed only 7.6 per cent of the total value of crops raised in 1909. The importance of these crops was greatest in the two North Central divisions, the value forming about three-fourths (75.4 per cent) of the total value of crops in the West North Central division, and about two-thirds (65.4 per cent) in the East North Central. In the remaining six divisions the value of cereals varied from about one-fourth to about one-third of the total value of crops, being 26.2 per cent in the South Atlantic division and 34.6 per cent in the Mountain division.

Except in the Mountain and Pacific divisions, corn was the most important of the cereals as measured by value. In the East and West North Central divisions corn contributed more than one-third of the value of all crops in 1909 and in the three southern divisions it was the crop second in importance. Wheat was not first in impor-

[1] *Thirteenth Census, 1910* (Washington, 1913), Vol. V, 540–1, 544–6.

tance in any division, but was second in the West North Central and Mountain divisions and third in the Pacific division. Oats ranked third among the several crops in the East North Central and Mountain divisions. . . .

Hay and forage is an important crop in the North and West, but not in the South. In four divisions it was the leading crop. In New England 41.9 per cent of the total value of crops raised in 1909 consisted of the value of hay and forage; in the Mountain division the proportion was 40.5 per cent, in the Middle Atlantic 31.4 per cent, and in the Pacific division 26.5 per cent. In the two North Central divisions the value of hay and forage was relatively less important; in the East North Central division it ranked second among the crops, and third in the West North Central division.

Cotton is an important crop only in the three southern divisions; its value constituted nearly one-half (49.9 per cent) of the total value of crops in the West South Central division, about two-fifths (40.8 per cent) in the South Atlantic, and over one-third (37.1 per cent) in the East South Central. Tobacco was the crop third in importance in the East South Central division.

Vegetables (including potatoes and sweet potatoes and yams) contributed more than one-fifth (21.5 per cent) of the value of all crops in New England in 1909 and over one-sixth (17.4 per cent) of the value of crops in the Middle Atlantic states. In no other division was the value of vegetables as much as one-tenth of the value of all crops. Potatoes, considered alone, was the crop second in rank in New England (forest products of farms being excluded from consideration as scarcely constituting a crop in the usual sense), and vegetables, excluding potatoes and sweet potatoes and yams, ranked third in the three divisions along the Atlantic seaboard.

Fruits and nuts contributed more than one-fifth (21.4 per cent) of the total value of crops in the Pacific division and nearly one-tenth (9.6 per cent) of the value of crops in the Middle Atlantic division. The New England and the Mountain divisions are the only others where the value of fruits and nuts exceeded 5 per cent of the total value of crops in 1909. The Pacific division was the only one in which fruits and nuts were among the three leading crops.

Forest products, which are not ordinarily looked upon as a farm crop, contributed exactly one-eighth of the total value of crops in New England, and more than 5 per cent of the value of crops in the South Atlantic and East South Central divisions. Considerable amounts of these products were reported for every division, but only

in the three divisions mentioned did they contribute as much as 5 per cent of the total value of all crops in 1909. . . .

The acreage of cereals taken as a group, of hay and forage, and of vegetables taken as a group, is widely though by no means evenly distributed through the country. Cotton and sugar cane are practically confined to the South and nearly all the tobacco is raised east of the Mississippi River. Among the minor crops peanuts and sweet potatoes and yams are almost entirely, and hemp is very largely, confined to the South; hops are practically restricted to two divisions, the Pacific and the Middle Atlantic; flaxseed is mainly confined to the West North Central division; while the other minor crops are in most cases largely concentrated in three or four divisions. . . .

When judged by total value of crops raised, Illinois was the most important agricultural state both in 1909 and in 1899; the total value of all crops in that state in 1909 was $372,270,000 and in 1899, $214,833,000. There was only one other state, Iowa, where the total value of crops raised in 1909 exceeded $300,000,000. In 7 states, Texas, Ohio, Georgia, Missouri, Kansas, New York, and Indiana, the total value of crops was between $200,000,000 and $300,000,000. In 17 other states the value of crops in 1909 exceeded $100,000,000 each.

Among the 26 states having a value of crops in excess of $100,000,000 each were all of the 12 states in the two North Central divisions; 2 of the 3 states in the Middle Atlantic; 4 of the 8 in the South Atlantic; all the 4 in the East South Central; 3 of the 4 in the West South Central; and 1 of the 3 in the Pacific, no state in the New England or in the Mountain division being included in the 26.

The absolute increase between 1899 and 1909 in the value of all crops produced exceeded $100,000,000 in seven states, namely: Illinois ($157,438,000), Georgia ($140,250,000), Texas ($131,169,000), North Dakota ($126,595,000), Iowa ($119,114,000), Nebraska ($103,656,000), and Kansas ($101,337,000); it exceeded $10,000,000 in each of the states of the Middle Atlantic, the East and West North Central, the East and West South Central, and the Pacific divisions, as well as in one state in the New England division (Maine) and in four in the Mountain division; the increase exceeded $1,000,000 in every state except Rhode Island.

The percentage of increase in the value of all crops between 1899 and 1909 was greatest in Idaho (270.7 per cent); Washington, with 235.4 per cent, was next, followed in order by North Dakota (234.3 per cent), Wyoming (219.4 per cent), Oklahoma (205 per cent),

and Colorado (200.4 per cent). Most of the states with very high percentages of increase had comparatively small aggregate crop values in 1899 and show absolute increases that are not exceptionally great. Georgia, North Dakota, and Nebraska are the only states where the increase in the value of all crops between 1899 and 1909 exceeded $100,000,000 and was also more than 100 per cent.

Of the states in the West every one except California shows an increase in the value of all crops of over 100 per cent; of the states in the South, four on the Atlantic coast (Florida, Georgia, South Carolina, and North Carolina) and two in the Southwest (Oklahoma and Arkansas) more than doubled the value of their crops during the last decade; but of the states in the North only three, North and South Dakota and Nebraska, show an increase of more than 100 per cent in the value of their crops. No state in the New England, Middle Atlantic, or East North Central divisions shows an increase in the value of crops as great as that for the United States as a whole (83 per cent).

While there was no state reporting a decrease in the total value of crops in 1909 as compared with 1899, there were 18 states reporting a decrease in known crop acreage. It may be noted that 9 of the 13 original states are among those reporting losses in crop acreage. Of the Western states, California is the only one reporting a decrease and of the Southern states, Virginia, West Virginia, Kentucky, Tennessee, and Maryland reported decreases, while of the Northern states a majority reported decreases in crop acreage, the four states on the western boundary of the West North Central division (North and South Dakota, Nebraska, and Kansas) being the only ones in the North to report a higher percentage of increase in crop acreage than the United States as a whole. During the decade there was an increase of over 1,000,000 acres in land devoted to crops in North Dakota, Oklahoma, South Dakota, Texas, Nebraska, Kansas, Washington, Georgia, and Colorado. New Mexico reported the highest percentage of gain, 222.8, followed by North Dakota, Oklahoma, Wyoming, Washington, and Idaho. In Iowa and in California the loss in acreage reported was over 1,500,000, and in New York and Pennsylvania it exceeded 500,000. In California the increase in the acreage of fruit and nut crops doubtless in part if not wholly offset the decrease in crops for which acreage was reported. Besides these 4 states 14 others reported less land in crops for which acreage was reported in 1909 than in 1899. The relative decrease was greatest in California, followed by New Hampshire, Connecticut, and Massachusetts.

VII. The Public Domain

Extent and Character, 1898 [1]

Although the frontier line disappeared during the decade 1870–1880, there yet remain millions of acres of public lands. Much of this land is not adapted to known agricultural methods, but there is reason to believe that as scientific agriculture progresses more and more of this land will be brought under cultivation. The extent and character of the public domain in 1898 were described in an official publication as follows:

There are within the limits of the United States, exclusive of Alaska and the new island possessions, nearly 573,995,000 acres of vacant Government land, besides 145,122,000 acres in Indian reservations, forest reserves, national parks, reservoir sites, and military reservations, or for some other reason reserved from settlement. The vast area of Alaska, which is very nearly all public land, together with lesser areas in Hawaii, Puerto Rico, and other new dependencies, will bring up the total extent of the national domain, exclusive of reservations, to nearly 1,000,000,000 acres. . . .

Future additions to the reservations for permanent forests and reservoir sites will no doubt diminish the area open to settlers, but these additions are likely to be counterbalanced in whole or in part by the opening of Indian and military reservations to settlement. The 1,000,000 acres granted to each of the arid States by the so-called "Carey act" will still further reduce the amount of land to be obtained by settlers directly from the National Government, but doubtless without reducing the total amount of public land available for settlement. At the present rate of disposal to individuals, the vacant lands in the United States proper would last for nearly a century. . . .

In the case of land grants in aid of railroad construction, lands within the limits of the grants are considered "unappropriated and unreserved" until selected by the grantee, though it is not certain that the usage of the various land offices is uniform in this respect. It follows from this mode of classification that to ascertain the amount of land still available for entry a deduction should be made from the amount given as "unappropriated and unreserved" to represent that portion of railroad grants not yet selected by the railroad companies. While no exact figures are available for this purpose, the General Land Office estimates the total amount of land granted to aid in

[1] *Yearbook of the Department of Agriculture, 1898* (Washington, 1899), 325, 327–9.

railroad construction at 156,893,468 acres, and as the amount patented up to July 1, 1898, was but 88,947,862 acres, the remainder is a little less than 68,000,000 acres. It is, however, very unlikely that patents will actually issue to the grantees for half that quantity of land, for some portions of the grants had been appropriated by settlers before the grants were made, and still larger areas are so mountainous and barren as to be scarcely worth selecting and patenting. A deduction of 25,000,000 acres from the area unappropriated and unreserved would probably be sufficient to cover future patents on account of railroad land grants. These grants consist of the alternate sections lying within wide strips of territory crossing the western part of the United States, and in some cases indemnity lands have been granted beyond the limits of the original grants. The Northern Pacific Railroad grant extends in a band 40 miles wide across Minnesota and 80 miles wide across North Dakota, Montana, the northern end of Idaho, and Washington; the Union Pacific and Central Pacific Railroad grants are in a strip 40 miles wide extending from the Missouri River across Nebraska, southern Wyoming, northwestern Utah, Nevada, and California, to San Francisco, with branches in Colorado and Kansas and northward through California and Oregon; the Atlantic and Pacific and Southern Pacific Railroad grants extend from the Rio Grande in New Mexico across Arizona and California to San Jose, with a branch to the southeastern corner of California. There are also many smaller grants in the more easterly public-land States, besides several wagon-road grants in Oregon and elsewhere.

PUBLIC LANDS FIT FOR PRODUCTIVE USES

Far more important than the exact area of the public domain legally open to settlement is the question how much of this public land is actually fit for cultivation or for other productive uses. Having regard to present conditions, it must be admitted that all the best parts of the public domain have been appropriated, and that comparatively very little good agricultural land remains open to settlement; the mineral value of that which remains may be very great, but even of the mineral deposits it may be said that the most accessible and most easily worked among them have probably been appropriated. Looking into the future, the question becomes much more difficult, for no one can tell even approximately how much of the land now lying waste may be ultimately reclaimed to productive uses. The one thing needed, as far as concerns the greater part of the 573,995,000 acres of vacant public land in the United States proper, including nearly

all west of the ninety-eighth or one hundredth meridian, is an adequate supply of water; and this applies to much of the mineral land, as well as to that which it is desired to reclaim for agricultural purposes. Vast tracts of arid land in the Western United States contain in an unusual degree all the elements of fertility except water, and with the aid of irrigation could be made to yield more abundantly than even the best land of the humid regions. It has been said that "sagebrush is unerring evidence of kindly soil and abundant sunshine."

Estimates of the amount of this land which can be irrigated with the water at command vary greatly, but there is none for the arid region as a whole more authoritative than those of Maj. J. W. Powell, formerly Director of the United States Geological Survey, and Mr. F. H. Newell, chief hydrographer of that Survey. Major Powell estimated that at least 150,000 square miles, or 96,000,000 acres, could be economically reclaimed by irrigation within the present generation; or, as he said before a Congressional committee in 1890, that about 100,000,000 acres could be reclaimed by the utilization of perennial streams alone. Mr. Newell places the irrigable amount at 74,000,000 acres or about 7.6 per cent of the total area of the sixteen Western public-land States and Territories. This is a very conservative estimate, in which financial as well as engineering considerations are taken into account, and it looks not to the remote future, but only to what is likely to be profitable and therefore practicable within a generation. Future improvements in irrigation engineering and methods and discoveries of new underground water supplies, together with the increasing demand for agricultural products resulting from an increasing population, may in the course of time make it profitable to irrigate a much larger area; but any attempt to state the ultimate extent of irrigation would be only conjecture. The amount of land irrigated in 1889, the latest year for which census figures are available, was in most of the arid States so small in proportion to the estimated irrigable area as to be almost negligible in a rough calculation, so that it will not be far from the truth to take Mr. Newell's conservative figures as representing the probable future increase of the irrigated area. But it must be remembered that some part of the lands to be reclaimed will probably be lands now in private ownership. Although the area now irrigated is very small as compared with the total irrigable area, the canals and ditches already constructed take most of the water which is easily obtainable, and the future development of the West depends mainly upon the construction of storage reservoirs

and large canals, or other difficult and expensive undertakings which are beyond the power of individuals or small groups of individuals. Much will therefore depend upon the policy adopted for attracting capital to the irrigation industry. It is evident that the work of reclamation must be undertaken either by public agencies or by large corporations.

CHAPTER XIX

COMMERCE, TRANSPORTATION, AND COMMUNICATION, 1860–1915

I. Internal and Foreign Commerce

A. *Extent and Growth, 1850–1909*[1]

The growth of the internal and the foreign commerce of the United States since 1850 reflects accurately the economic progress of the country. The extent of this growth is shown in the following summary:

Conservation and commerce are so closely allied and the latter, commerce, so much affected by the application of the former, conservation, that a very few words on commerce may not be inappropriate to this discussion of conservation. This seems particularly true in case the discussion should relate especially to internal commerce, or the exchanges of our own people among themselves. True, the foreign commerce of the United States has grown from $300,000,000 in 1850 to $3,000,000,000 in the fiscal year 1908, being to-day practically ten times as much as in 1850; while population meantime was growing from 23,000,000 to 86,000,000, the per capita foreign commerce thus being $13.71 in 1850 and in the fiscal year 1908, $34.74, an increase of about 150 per cent in the per capita value of our foreign commerce. In internal commerce, however, which seems more closely related to the question of conservation, perhaps because of its greater importance than the foreign commerce and of its closer relation to the people in their every-day life — in internal commerce the growth has been much greater, the internal commerce of the United States having been valued at $2,000,000,000 in 1850 and over $28,000,000,000 in 1907, being thus practically fourteen times as much in 1907 as in 1850; while the per capita value of the internal commerce, which in 1850 was $86, was in 1907, $315. Thus, while foreign commerce is to-day ten times as much as in 1850, internal commerce is fourteen times as much as at that period; and the per capita of the foreign commerce

[1] *Report of the National Conservation Commission* (Washington, 1909), II, 57–8.

is now practically three times as great as in 1850, while the per capita value of the internal commerce is now practically four times as much as in 1850. The internal commerce of the United States, including in this term merely a single transaction in all the merchandise forming the exchanges among our own people, was in 1850 practically seven times as great as the entire foreign commerce, and in 1907 was nine times as great as the entire foreign commerce, and equaled in value all of the imports plus all of the exports of every nation of the world.

The measurement of the internal commerce of the United States is arrived at by a process entirely different from that by which the foreign commerce is measured. In determining the value of the foreign commerce, we require from every importer and every exporter a statement of the true value of the merchandise which he is importing or exporting, and aggregating these imports of all ports and exports of all ports we get the grand total of our foreign trade, which in the fiscal year 1908 aggregated, as already indicated, $3,000,000,000, against a little more than $300,000,000 in 1850. To measure the internal commerce of the country is more difficult, however, since there are no gateways through which it passes and at which a statement of its value may be required. It is possible, however, by a different process to determine the value of the merchandise which passes from hand to hand for consumption within the United States; and as statements of foreign commerce include merely the value of the articles comprising it, the measurement of the internal commerce by a statement of the value of the articles which it includes, and thus of a single transaction in those articles, seems to be a logical and fair one. We may, therefore, assume that if we can determine the value of the articles which form the internal commerce the measurement may at least approximate in accuracy the measurement of the foreign commerce to which we are more accustomed.

Fortunately, we are able to determine at certain dates in our national history the value of at least the principal articles entering the internal commerce of the country. The census shows the value of manufactures, of agricultural products, the products of the mines, the fisheries; and the record of imports shows the value of merchandise brought in from foreign countries and subsequently entering the internal commerce. By aggregating these stated values at the place of production of the principal articles entering the internal commerce of the country and adding a reasonable sum as the probable cost of transporting them to the consumer, we may at least approximate

the value of the merchandise consumed among our own people, a single transaction in which may be properly accepted as a measurement of the value of the internal commerce. The census of 1900 showed the value of manufactures in the United States to be $13,000,000,000; of products of agriculture, practically $4,000,000,000; and of minerals, about $1,000,000,000. The importations of 1900 were practically $1,000,000,000 in value. Adding to these the products of the forests and fisheries and the increased value of all products due to transportation from the place of production to the purchaser, we may fairly set down the value of the internal commerce of the country as measured by a single transaction in those articles at $20,000,000,000 in the year 1900.

Applying this method to earlier and more recent years, I find that the value of the internal commerce of the country may be reasonably estimated at $2,000,000,000 in 1850, $3,500,000,000 in 1860, $5,000,000,000 in 1870 (gold value), $7,750,000,000 in 1880, $12,000,000,000 in 1890, $20,000,000,000 in 1900, and $28,000,000,000 in 1907, the last named year being estimated upon the census figures of manufactures for 1905, the Agricultural Department's estimate of the value of farm products in 1907, the Geological Survey estimate of the value of mineral products, and the stated value of imports of that year. Comparing these with the census figures of population, we get the per capita value of the internal commerce in 1850, $86; in 1860, $111; in 1870, $132; in 1880, $154; in 1890, $192; in 1900, $261; and in 1907, $326. Meantime the per capita wealth has grown, according to the census figures, from $307 in 1850 to $514 in 1860; $780 in 1870; $850 in 1880; $1,039 in 1890; $1,165 in 1900; and $1,310 in 1904, the latest year for which estimates have been made, the increase in per capita wealth having been slightly greater than the increase in per capita of internal commerce.

B. *Character of the Internal Trade, 1899* [1]

The character of the internal trade of the country in so far as it relates to the channels through which the goods are distributed was well put in the Report of the Industrial Commission as follows:

Increase in the production of goods is not necessarily accompanied by a corresponding increase in the prosperity of wholesale and retail trade. Some classes of goods are sold only to large consumers, and to a considerable extent go directly from the producer to them.

[1] *Final Report of the Industrial Commission* (Washington, 1902), Volume XIX of the Commission's Report, 545–9.

Changes in business methods may tend, and doubtless during recent years have tended, to increase the proportion of the product which is thus sold without the intermediary service of independent dealers. Many other conditions of trade and commerce may change independently of the general state of productive industry. On the whole, however, there can be no question that wholesale and retail business has shared largely in the general advance in prosperity which has characterized the past three or four years. . . .

One thing is made clear by the investigation of the Industrial Commission. The importance of the middleman between the producer and the retail dealer is diminishing, and in some instances retail dealers themselves are being displaced by the practice of direct selling by manufacturers. In the days when manufacturing establishments were for the most part small and when retail stores were likewise small, it was almost out of the question for the manufacturer and the retailer to deal directly with one another. The manufacturer would have had to incur an expense which would be enormous in proportion to the value of his goods, if he sought to bring them to the notice of scattered small retail dealers. Most classes of manufactured products were therefore handled by jobbers or commission men. The jobber bought goods outright from the manufacturer, assuming the risk of sale as well as enjoying a considerable part of the profit coming from fluctuations in the market. The commission dealer acted rather as an agent of the producer, receiving a percentage upon the sales which he effected.

At present there seems to be a very marked decline in the jobbing business and, to a less extent, a decline also in the commission business. The latter suffers less, because under modern methods goods ordered through a commission broker can be shipped directly from the producer to the retailer or consumer, without the expense of rehandling and double freighting, which is usually incurred in the jobbing business. Both classes of middlemen are, however, to a considerable extent being displaced. The increase in the size of manufacturing establishments makes it possible for many producers to maintain regular selling departments, the expense of which is distributed over so large a business as to become less than that of employing middlemen. In some cases manufactures are selling, to a considerable extent, directly to small consumers without even the aid of retail dealers. Sale direct from the factory, often by delivery on approval, is increasingly common, while not a few large manufacturers maintain retail stores in various cities.

The practice of making direct sales to retailers or consumers has been especially common in the case of the great industrial combinations. The Standard Oil Company long ago adopted the system in most of its markets. The Pittsburg Plate Glass Company, which has a large control of the plate-glass business in this country, has established distributing branches which have tended largely to drive out the jobbers. It is asserted by the officers of the company in this case that their action was forced by the dictatorial conduct of the jobbers, who had a national association and endeavored to dictate to the manufacturers to what jobbers they should sell. In other cases the elimination of the jobber is merely a matter of evolution, of simplification. One witness, however, who has had large experience in wholesale business, as well as in the management of various industrial combinations, points out that producers must exercise great care in endeavoring to economize by doing away with middlemen. Some kinds of business permit this method of selling more readily than others. Especially where goods are sold on the basis of popular trade-marks and brands, the method of direct sales to retailers is likely to prove advantageous.

Another powerful influence which has tended to reduce the importance of the wholesale dealer has been the great increase in the size of retail establishments in many cases. Department stores buy goods of many classes, often in exceedingly large quantities, in some cases purchasing the entire output of mills. Moreover, many stores dealing in special classes of articles have so developed that their purchases are on a scale much larger than before. These large retailers, therefore, tend more and more to deal directly with manufacturers, in fact often ordering in advance of actual production the particular styles which they desire. This latter practice relieves the manufacturer of risk, minimizing the time between the production and the consumption of goods. . . .

It is very generally asserted that the consumer benefits largely by the increased directness of the process by which goods are brought to him from the manufacturer. The elimination of the middleman is an elimination of expense. This same tendency to eliminate the middleman is seen in the handling of agricultural products as well as of manufactured commodities, and it is probable that a saving to the entire community has been affected.

Accurate information regarding the extent to which middlemen have already been displaced can not be secured. One witness asserts that the number of dry-goods jobbing houses in New York a few

years ago was twenty-eight, and that they have now been reduced to four, which, while larger than the average of the former establishments, do much less total business than they did. A similar condition obtains in the Boston dry-goods business. Again, it is said that the larger part of the cotton goods produced in New Bedford is sold directly to retailers, although commission houses still do a large business in cottons produced in New England.

Somewhat in advance of the movement toward consolidation on the part of producers came the concentration of retail business in large stores. The department store, which is really a consolidation of smaller stores handling different lines of goods, dates back to the period immediately following the civil war, and seems to be due to the changes in the methods of conducting business which developed about that time. Prices were falling, the margin of profit was growing smaller, and it became necessary for merchants to turn over their stocks rapidly. They thus needed larger capital and new sales methods.

While, from the nature of things, there can not be such concentration in retail trade as in production or in wholesale trade, and while for that reason department stores have not multiplied with the same remarkable rapidity as have industrial combinations, there nevertheless seems to be a constant movement toward the concentration of retail trade, and department stores are to be found in all parts of the country.

A feature connected with the establishment of such stores, which has been the subject of more or less complaint, has been the introduction of mail-order departments, by means of which customers living at a distance, who are unable to avail themselves in person of the advantages of the department stores, with their large and varied stocks, are enabled to make purchases by mail.

There can be no doubt that the establishment of the mail-order system tends to decrease the sales of the local dealer, and that he has reason to view its growth with a certain degree of apprehension. Manifestly, there must be somewhat narrow limits to the growth of the system, since in the case of a very large majority of the lines of goods carried by department stores, satisfactory purchases are possible only after personal inspection of the goods. In so far as the mail-order system exists, however, it must exist because the people in the small towns can not be served so satisfactorily by their home stores as they can be by the department stores in the large cities. The first consideration is doubtless the greatest good to the greatest

number, and if customers find the mail-order system of advantage there is every reason for its continuance. . . .

There seems to be no doubt that the department stores are tending to eliminate the jobbers, and are, to a considerable extent at least, crowding out the small retail dealers. There are apparently few instances in which the department store has destroyed the business of the retailers by unfairly lowering prices, only to raise them again when a monopoly has been secured. In the smaller towns or cities, where but one department store is to be found, the crowding out of the small retailers might result in monopoly on the part of the department store. In the larger cities, where several department stores are to be found in competition with each other, there can be no element of monopoly in the business, and the success of the department store must be attributed to the fact that the public finds it more to its advantage to trade at the large stores than at the smaller stores. The department store, with the large capital at its command and with the large purchases it must necessarily make at one time, is no doubt able to buy goods at lower prices than the small dealers. Furthermore, if rightly managed, the department store must be able to make great economies in rent, cost of superintendence, office expenses, and, possibly, in clerk hire. If these advantages are shared with the public, the result must of necessity be lower prices and consequent benefit. In the absence of monopoly, which in general seems to be the situation to-day, the establishment of department stores must be regarded as being on the whole advantageous to the consuming public.

It is perhaps not so easy to determine what has been their effect upon labor. The representatives of the department stores and of the small stores appear to hold antipodal opinions on this point. The representatives of the department stores, on the one hand, claim that the establishment of the large stores has resulted in the reduction of prices, has thereby stimulated consumption, and therefore increased employment, both in the manufacture of goods and in their distribution, and that more than the total number of competent persons thrown out of employment in the small stores by the competition of department stores are given employment in the department stores themselves. They assert further that wages are also higher and hours of labor fewer in the department stores than in the small stores; that an employee in a large department store may easily hold a more important position than if working for himself; and that employees, instead of having their individuality destroyed by employment in the department store, frequently identify themselves

with the interests of the concern and take pride in the establishment. The small dealers, on the other hand, claim that fewer people are now employed and that wages have been very much reduced through the establishment of department stores. There has not been sufficient statistical investigation to make it possible to determine the comparative value of these conflicting opinions in respect to the effect of the department stores on employment and on wages.

Some department stores may be guilty of fraudulent advertising, but this does not seem to be an inherent quality of the department store, but to depend rather on the character of the men in charge, and is to be found in connection with the small stores as well as with the large stores.

II. The Merchant Marine

A. *American and Foreign Vessels in the Carrying Trade of the United States, 1860–1910* [1]

The extent to which American vessels engaged in the foreign trade of this country is indicated below.

1. Foreign Carrying Trade of the United States, 1860–1910

Year	In Cars and Other Land Vehicles	In American Vessels	In Foreign Vessels	Per Cent Carried in American Vessels
1860	.....	$507,247,757	$ 255,040,793	66.5
1865	.....	167,402,872	437,010,124	27.7
1870	.....	352,969,401	638,927,488	35.6
1875	$ 20,388,235	314,257,792	884,788,517	26.1
1880	20,981,393	258,346,577	1,224,265,434	17.4
1885	45,332,775	194,865,743	1,079,518,566	15.3
1890	73,571,263	202,451,086	1,371,116,744	12.9
1895	83,104,742	170,507,196	1,285,896,192	11.7
1900	154,895,650	195,084,192	1,894,444,424	9.3
1905	242,265,329	290,607,946	2,103,201,462	12.1
1910	319,132,528	260,837,147	2,721,962,475	8.7

[1] *Annual Report of the Commissioner of Navigation, 1912* (Washington, 1912), 194–6.

2. Tonnage of American and Foreign Vessels Entered and Cleared in the Foreign Trade of the United States, 1860–1910

Year	American	Per Cent	Foreign	Per Cent
1860	12,087,209	71	4,977,916	29
1865	5,968,795	47	6,812,090	53
1870	6,992,967	38	11,332,095	62
1875	7,310,589	30	16,278,728	70
1880	6,834,319	19	29,219,229	81
1885	6,363,567	21	24,456,029	79
1890	8,149,878	23	28,106,245	77
1895	8,977,057	23	30,068,404	77
1900	12,344,570	22	44,099,576	78
1905	14,283,632	23	47,857,126	77
1910	17,697,062	22	62,244,602	78

B. *American Vessels Engaged in Commerce, 1860–1914* [1]

During the Civil War the tonnage of American vessels engaged in foreign commerce decreased almost 40 per cent, that engaged in coastwise trade (not including the Great Lakes) increased more than 20 per cent, while the tonnage engaged in lake commerce increased approximately 50 per cent. Between 1865 and 1911 the tonnage of the first decreased from more than 1,500,000 to less than 1,000,000; the second increased from 2,800,000 to about 3,500,000; while the third increased from 450,000 to a little more than 2,000,000. The most significant fact, therefore, about the tonnage of American vessels has been the absolute decline in that engaged in foreign trade and the increase of that along the coast and on the Great Lakes.

American Tonnage, 1860–1910

Year	Engaged in Foreign Trade and Whale Fisheries	Engaged in Coastwise Trade and Cod and Mackerel Fisheries [2]	Engagaged in Commerce of the Great Lakes
1860	2,546,237	2,339,857	467,774
1865	1,602,583	2,820,502	673,697
1870	1,516,800	2,045,003	684,704
1875	1,553,827	2,462,014	837,891
1880	1,352,810	2,110,122	605,102
1885	1,287,998	2,227,988	749,948
1890	946,695	2,414,739	1,063,063
1895	838,186	2,556,315	1,241,459
1900	826,694	2,772,558	1,565,587
1905	954,513	3,439,883	2,062,147
1910	791,825	3,821,155	2,895,102
1914	1,076,152	3,962,141	2,882,922

[1] *Statistical Abstract.* (See Index, Commerce, etc.)
[2] Exclusive of the commerce of the Great Lakes.

C. *President McKinley on the Merchant Marine, 1899* [1]

Since the Civil War the merchant marine of the United States has been on a decline. In 1860 about two-thirds of the commerce of this country was carried in American vessels; by 1910 it had declined to less than one-tenth. In 1899 President McKinley called attention to the state of affairs as follows:

The value of an American merchant marine to the extension of our commercial trade and the strengthening of our power upon the sea invites the immediate action of the Congress. Our national development will be one-sided and unsatisfactory so long as the remarkable growth of our inland industries remains unaccompanied by progress on the seas. There is no lack of constitutional authority for legislation which shall give to the country maritime strength commensurate with its industrial achievements and with its rank among the nations of the earth.

The past year has recorded exceptional activity in our shipyards, and the promises of continual prosperity in shipbuilding are abundant. Advanced legislation for the protection of our seamen has been enacted. Our coast trade, under regulations wisely framed at the beginning of the Government and since, shows results for the past fiscal year unequaled in our records or those of any other power. We shall fail to realize our opportunities, however, if we complacently regard only matters at home and blind ourselves to the necessity of securing our share in the valuable carrying trade of the world.

Last year American vessels transported a smaller share of our exports and imports than during any former year in all our history, and the measure of our dependence upon foreign shipping was painfully manifested to our people. Without any choice of our own, but from necessity, the Departments of the Government charged with military and naval operations in the East and West Indies had to obtain from foreign flags merchant vessels essential for those operations.

The other great nations have not hesitated to adopt the required means to develop their shipping as a factor in national defense and as one of the surest and speediest means of obtaining for their producers a share in foreign markets. Like vigilance and effort on our part cannot fail to improve our situation, which is regarded with humiliation at home and with surprise abroad. Even the seeming sacrifices, which at the beginning may be involved, will be offset later by more than equivalent gains.

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[1] *Messages and Papers of the Presidents.* Edited by James D. Richardson ([Washington], 1896–1903), X, 134–5.

The expense is as nothing compared to the advantage to be achieved. The reestablishment of our merchant marine involves in a large measure our continued industrial progress and the extension of our commercial triumphs. I am satisfied the judgment of the country favors the policy of aid to our merchant marine, which will broaden our commerce and markets and upbuild our sea-carrying capacity for the products of agriculture and manufacture; which, with the increase of our Navy, mean more work and wages to our countrymen, as well as a safeguard to American interests in every part of the world.

D. *A Plea for Ship Subsidy, 1901* [1]

President Roosevelt, in his first message to Congress (December 3, 1901), called attention to the state of the merchant marine of the United States and suggested that the government take some action whereby this branch of industry should be restored.

The condition of the American merchant marine is such as to call for immediate remedial action by the Congress. It is discreditable to us as a Nation that our merchant marine should be utterly insignificant in comparison to that of other nations which we overtop in other forms of business. We should not longer submit to conditions under which only a trifling portion of our great commerce is carried in our own ships. To remedy this state of things would not merely serve to build up our shipping interests, but it would also result in benefit to all who are interested in the permanent establishment of a wider market for American products, and would provide an auxiliary force for the Navy. Ships work for their own countries just as railroads work for their terminal points. Shipping lines, if established to the principal countries with which we have dealings, would be of political as well as commercial benefit. From every standpoint it is unwise for the United States to continue to rely upon the ships of competing nations for the distribution of our goods. It should be made advantageous to carry American goods in American-built ships.

At present American shipping is under certain great disadvantages when put in competition with the shipping of foreign countries. Many of the fast foreign steamships, at a speed of fourteen knots or above, are subsidized; and all our ships, sailing vessels and steamers alike, cargo carriers of slow speed and mail carriers of high speed, have to meet the fact that the original cost of building American ships is greater

[1] *Messages and Papers of the Presidents.* Edited by James D. Richardson ([Washington], 1896–1903), X, 429–30.

than is the case abroad; that the wages paid American officers and seamen are very much higher than those paid the officers and seamen of foreign competing countries; and that the standard of living on our ships is far superior to the standard of living on the ships of our commercial rivals.

Our Government should take such action as will remedy these inequalities. The American merchant marine should be restored to the ocean.

III. Commerce on the Great Lakes,

A. *Interlake and Local Traffic, 1900* [1]

An interesting account of the lake traffic in 1899 is found in the Report of the Industrial Commission. The following extract from the Report deals with the principal ports, tonnage and seasons of navigation.

The traffic from one lake to another is recorded in such a manner as to show the relation between Lake Superior and the other lakes. It thus appears that the greater proportion of the freight moves between Lake Superior and Lake Erie; 86 per cent of the east-bound tonnage passing through the Sault Ste. Marie canals was bound for Lake Erie ports in 1900, and nearly 96 per cent of the west-bound tonnage originated at Lake Erie ports and was destined for Lake Superior ports.

MOVEMENT OF EAST AND WEST BOUND FREIGHT

East Bound

From Lake Superior ports to:	Net tons
Lake Michigan ports	2,054,819
Lake Huron ports	659,405
Lake Erie ports	17,604,773
Lake Ontario ports	213,496
Total	20,532,493

West Bound

To Lake Superior from lower lake ports:	Net tons
Lake Michigan ports	73,841
Lake Huron ports	130,333
Lake Erie ports	4,890,938
Lake Ontario ports	15,468
Total	5,110,580

[1] *Final Report of the Industrial Commission* (Washington, 1902), Volume XIX of the Commission's Report 468–70.

Local traffic on the Great Lakes is comparatively undeveloped, with the exception of the traffic on Lake Michigan and Lake Erie. Nearly the whole of the commerce moved is carried from one end of the system to the other. About four-fifths of the iron ore mined in the Lake Superior region is transported to Lake Erie ports, and nearly the whole of the remaining fifth is taken to Milwaukee and Chicago. The local traffic on Lake Michigan consists mainly in the cross-lake traffic of the railroads having termini on both sides. The cars are loaded bodily on car ferries and taken across from one side to the other. Manitowoc, Milwaukee, Kewaunee, Menominee, Marinette, and Gladstone on the western side, and Frankfort, Ludington, Muskegon, and Ottawa Beach on the eastern side, enjoy the most of this traffic. Lake Michigan is the only lake that is open to navigation all the year.

In point of local traffic the southern shores of Lake Erie have developed package freight lines between themselves and Buffalo at the one end and Detroit at the other. The fastest steamers on this body of water connect Cleveland with the above terminal ports. For a long time lake passenger and packet lines were successfully operated in competition with railroads, but such is not now the case. Such traffic is chiefly conducted by steamship lines in intimate relations with or under the control of the railroad lines. These are really collectors and distributors of freight, acting as an extension of the scope of railroad territory. Most, if not all, of the trunk lines have their lines of steamships which make regular connections with upper lake ports and with the terminal ports on the lower lake shores.

On Lake Michigan, centering at Milwaukee and Chicago and points farther north on both coasts, for the whole year round local traffic is carried on in connection with the railroads. Constant communication between the east and the west coasts is maintained in spite of ice by steam-driven car floats, constructed so as to break their way, even in the coldest weather.

The main movements of traffic occur between the upper lake ports on the one hand and the lower lake ports, south of the St. Clair River, notably Detroit, Toledo, Cleveland, Ashtabula, Conneaut, Erie, and Buffalo, on the other. . . .

The season of lake navigation is about eight months in length. It usually opens in the latter part of April and closes in the early part or about the middle of December. Movements from the upper lakes are dependent on the opening of the connecting straits. The Straits of Mackinac are usually covered with ice during the closed season of navigation and freight movements from Chicago, Mil-

waukee, and other Lake Michigan points are detained until the prospect of passing the straits is practically assured in the spring. From Lake Superior points southward to the lower lakes the season of navigation opens and closes with the opening and closing of the Sault Ste. Marie Canal.

Nearly all the commodities handled on the lakes may be classed under the head of raw materials. The chief articles of traffic from the upper lakes eastward are flour and grain, iron ore, and lumber. Westward the traffic is primarily coal, salt, and general merchandise. Owing largely to the small number of articles which can be handled in bulk rapidly, and of which a large amount enters into trade at a few points, the traffic operations on the lakes have been developed in a manner found in no other part of the world. In the first place, the size of vessels has been greatly enlarged in order to carry a greater bulk at lower cost per unit. Secondly, the terminal facilities for handling these leading articles have all been enlarged and improved by mechanical equipments, making it possible to load and unload rapidly and therefore to increase the number of trips which a vessel may make between ports in a season. To these causes more than any other is to be attributed the rapid development of the shipping on the lakes and the traffic movements that have called the tonnage into existence.

B. *Recent Development, 1890–1909* [1]

The development of the lake traffic since 1860 has been due primarily to the large eastbound shipments of ore and grain. To what extent this traffic has grown is shown by the following report:

The principal characteristics of Lake commerce are the preponderance of eastbound over westbound shipments and the fact that the traffic is mainly in a few commodities — iron ore, grain, coal, and lumber. There is a considerable movement of miscellaneous and package freight, both local and through, but it is small compared with the enormous bulk-freight traffic in the crude products of contiguous mines, forests, and grain fields.

Through traffic constitutes the greater part of the total freight movement. The main course of this lies between the western extremity of Lake Superior and the southern shore of Lake Erie.

The Lake traffic was not reported as a whole prior to 1889, when, according to the Census, the domestic traffic amounted to 25,266,974 net tons. The domestic traffic amounted to 45,000,000 tons in 1901,

[1] *Report of the National Conservation Commission* (Washington, 1909), II, 37–9.

and in 1907 to more than 80,000,000 (shipments 83,507,000 and receipts 81,124,000 net tons).

Iron ore and coal form by far the greater part of the Lake traffic, and furnish together 98 per cent of the total increase from 1905 to 1907. The movement of lumber during these years has declined in importance; other traffic, outside of ore and coal, has remained about stationary.

Since 1890 with the development of the Lake Superior mines, the United States has taken first rank among the world's iron producers. Of the total domestic production of iron ore, approximately 80 per cent was transported by way of the Great Lakes (41,000,000 net tons in 1906 and 45,500,000 net tons in 1907), constituting in some years more than half of the total domestic Lake traffic.

Next in volume to iron ore, and first in the westbound Lake traffic, is the westbound movement of coal. This was over 21,000,000 tons in 1907, representing about a fourth of the domestic Lake traffic.

In the movement of flour and grain (eastbound) there is active competition between the Lake and all-rail routes, and with the decline in export trade the domestic movement on the Lakes has remained practically stationary in recent years, at about 150,000,000 bushels of grain and 1,300,000 tons of flour. There has been an increase of traffic from American ports to Canada and also between Canadian ports.

The traffic in logs and lumber is decreasing in volume and still more in relative importance. Nevertheless, it still constitutes one of the leading items.

Some of the less important forms of traffic are the movement of copper, salt, pig iron, and package and miscellaneous freight. About 100,000 tons of copper ore are annually shipped, mainly from the copper district in the Upper Peninsula of Michigan. Salt is shipped by Lake in considerable quantities from Manistee and Ludington, Mich., and in smaller quantities from Buffalo and other points. Pig iron moves in small lots between a considerable number of ports. Package and miscellaneous freight forms about a tenth of the total traffic.

Lake Superior shows the largest volume of shipments of any of the Great Lakes, domestic shipments aggregating over 40,000,000 tons in 1906. About 65 per cent of the total traffic of the Lakes passes in or out of Lake Superior through St. Marys Falls canals. Lake Erie has the largest receipts (43,600,000 tons in 1906 and 47,000,000 in 1907 in the domestic traffic), is second in volume of shipments

(18,450,000 tons in 1906), and has the largest proportion of the total traffic. Lake Michigan ranks third, but has the largest amount of local traffic.

Notwithstanding the large number of Lake ports, about a dozen ship and receive 80 per cent of the water-borne traffic. Duluth-Superior is the most important port for shipments and has the largest water-borne traffic of any of the Lake ports, aggregating over 29,000,000 tons in 1906, mainly ore, grain, and coal. Chicago and Milwaukee are among the leading ports, both for shipments and receipts. The Lake commerce of Chicago amounts to about 10,000,000 tons annually, and that of Milwaukee to 6,000,000 tons. Buffalo and Cleveland are also ports of first importance, both in the volume and in the variety of their commerce, and Buffalo has the largest receipts of any of the Lake ports. The Lake commerce of Buffalo for 1906 exceeded 15,500,000 tons (domestic traffic 14,345,000 tons), and, including canal traffic, the total water-borne commerce of Buffalo was over 17,320,000 tons. The Lake commerce of Cleveland for 1906 was 12,247,000 tons (domestic traffic 11,670,000 tons). Other important but more specialized ports include Two Harbors, Ashland, and Marquette, on Lake Superior, and Escanaba, on Lake Michigan, for shipments of ore; Toledo, Ashtabula, Lorain, Conneaut, and Erie, on Lake Erie, for receipts of ore and shipments of coal, and Tonawanda for receipts of lumber.

IV. Rail and River Traffic

A. *Growth of Railroad Systems to 1900* [1]

The most important railroad development during the past generation has been in the direction of consolidation. Before the Civil War American railroads were short and disconnected, and continued to be so until as late as 1880. This was the period of railroad extension. Many miles were laid down by numerous independent builders, with little regard for those lines already built. The next stage was one of consolidation, in which the guiding hand was that of the capitalist and not that of the builder or promoter. The extent of this consolidation down to the year 1900 is given by the Industrial Commission as follows:

FIRST PERIOD — TO 1870

The development of American railroad systems down to 1898, as judged by magnitude alone, may be roughly divided into three periods. In the first — that is, down to 1870 — a few hundred miles in length

[1] *Final Report of the Industrial Commission* (Washington, 1902), Volume XIX of the Commission's Report, 304–6.

constituted the maximum for efficient operations. The Illinois Central, with 700 miles of line, was long considered one of the greatest railroads in the world. Until after the civil war there was only one road with a length aggregating more than 1,000 miles. This growth began early in the fifties, at which time the Pennsylvania system first surpassed 500 miles in length, and in 1853 to 1858, when the New York Central nucleus was formed by the consolidation of some sixteen independent corporations. In the territory west of Chicago the Chicago and Northwestern road operated but 119 miles in 1859, a figure which rose to upward of 500 in 1866. The inconvenience, both for freight and passenger traffic, incident to these small systems is of course obvious. It is stated that, for instance, a journey from New York to the Mississippi in the fifties involved not less than seven bodily transfers from one car to another.

SECOND PERIOD — 1870–1890

The second period in the growth of consolidation extended to about 1890, at which time 5,000 miles represented about the maximum length of a single railroad in the United States. The Pennsylvania road had grown to about 4,000 miles in length by 1880. The absorption of the Nickel Plate road by the Lake Shore and Michigan Southern in 1882, followed by absorption of the West Shore road by the New York Central in 1885, very considerably increased the length of systems under common control. In the West the Chicago and Northwestern road had grown by 1886 to about 3,500 miles, to which was added some 1,500 miles by the control of the Chicago, St. Paul, Minneapolis and Omaha, and the Fremont and Elkhorn roads. By 1889 the Union Pacific road owned 2,000 miles of line, but controlled nearly 4,000 more. It is difficult to determine whether the enactment of the act to regulate commerce produced any effect upon this growth of large systems. Upon the one hand it appears, from investigation by the Interstate Commerce Commission itself, that consolidation was rather lessened after 1887 as compared with preceding years. Thus, from their data it appears that an average of twenty-seven companies per year were consolidated in 1886, 1887, and 1888, as compared with eighty-six companies annually consolidated in 1880, 1881, and 1882. On the other hand, judged by mileage, 1880 witnessed a consolidation of about 4,000 miles, followed in 1889 by 6,600 miles, and in 1890 by about 3,000 miles of line. It does not appear from this evidence that any specific influence was immediately traceable. Judgment should be based upon a considerable term

of years, in order to eliminate the direct effect of prosperity or depression in any case.

THIRD PERIOD — 1890–1898

The decade after 1890 for the first time witnessed the growth of systems aggregating as high as 10,000 miles under single control. The Pennsylvania road rapidly increased its mileage to upward of 7,000, for example. The interchange of business at Chicago between trunk lines and the Western system had already begun to foreshadow alliances covering both territories. Typical of these were the close working agreements between the Vanderbilt system and the Chicago and Northwestern and the Union Pacific in the Far West. The growth in size of the roads, for purposes of operation at least, although not all of them were necessarily consolidated, is shown by the following statement: In 1867, one road alone exceeded 1,000 miles, constituting about 7 per cent of the total mileage of the country. Ten years later, in 1877, 11 roads exceeded this figure, constituting 20 per cent of the mileage. In 1887, 28 companies, with 44 per cent of the mileage of the United States, were over 1,000 miles in length; and in 1896, 44 companies, or 56.9 per cent of the mileage, exceeded this size. In 1900 over 60 per cent of the mileage of the United States was included in systems larger than 1,000 miles. This statement illustrates the rapid development which took place after 1890. A comparison of 1880 with 1900 shows that in the former year there were 2,885 railroad companies in existence, either operated independently or under lease, aggregating 93,000 miles in length. In June, 1900, the mileage had more than doubled, with a total number of 2,023 corporations; but of these only 847 were independently operated, the rest being either leased or subsidiary.

It is significant as bearing upon the growth of railroad systems that the period of depression of 1893–1897 retarded for some years the progress of its development. More than this, several important systems were dismembered as a result of the reorganizations effected during that period. Thus, for instance, the Atchison road lost the St. Louis and San Francisco; and the Union Pacific system lost the Oregon Short Line. In fact, the latter road was entirely dismembered. The Erie Railroad alone, among the important ones which were subject to reorganization, was able to resist the disrupting tendency of financial readjustments. The low-water mark in consolidation occurred in 1898, when only 174 miles were actually consolidated, though others were merged or leased. The entire reorganization of such

roads as the Richmond and West Point Terminal opened the way to the formation of newer and more important systems, such as the Southern Railway, in the subsequent years. This latter has, for example, at the present time absorbed almost forty minor corporations in a system aggregating between 6,000 and 7,000 miles.

THE CONSOLIDATIONS OF 1898 TO 1900

General Description

Since the return of prosperity in 1898, railroad consolidation upon a scale hitherto unequalled has been under way. The earlier systems, which during the nineties rose to a maximum of 10,000 miles of line, have now been superseded by the organization of systems under common control which include from 15,000 to 20,000 miles apiece. The extent of this movement may be judged from the statement of the Interstate Commerce Commission that "disregarding mere rumors and taking account of well authenticated statements, there were absorbed in various ways between July 1, 1899, and November 1, 1900, 25,311 miles of railroad. There are in the whole United States something less than 200,000 miles of road; more than one-eighth of this entire mileage was, within the above period, brought in one way and another under the control of other lines." Since the 1st of November, 1900, this rate of consolidation has been still further exceeded, while at the same time the character of the changes has become noticeably different. Forces are apparently at work which may within the immediate future bring the railroad system of the United States under the control of comparatively few dominating financial interests. It is highly important that the character of this change should be thoroughly understood, inasmuch as it involved not alone the consolidation of hitherto independent railroads, but the amalgamation of entire systems.

B. *Freight Rates, 1870–1900* [1]

In 1900 the average charge by the railroads for hauling a ton of freight one mile was less than one cent. There were, however, considerable differences in freight rates. Some localities had cheaper rates than other localities. Bulky articles like coal paid less freight proportionally than such articles as groceries, provisions, etc. There were other differences of a like nature.

It is incontrovertible, as shown by many witnesses before the Industrial Commission, and by other authority, that freight rates

[1] *Final Report of the Industrial Commission* (Washington, 1902), Volume XIX of the Commission's Report, 274–6; 278–81.

have declined very greatly throughout the United States since the close of the civil war. On the other hand, it does not appear that any such corresponding reduction in passenger rates either in amount or extent has taken place in the same period. In respect to freight rates this may be shown in either one of two ways, either by comparison of the actual rates charged for specified service between given points throughout a series of years, or, secondly, by means of what is called the revenue per ton per mile. The latter is more commonly used as a basis for comparison and has many advantages. The revenue per ton per mile for a given road, or for the railroad systems of the United States, is computed by dividing the total freight revenue for that service, whatever it may be, by the number representing the amount of freight in tons hauled one mile. Thus, for example, if the total freight revenue of a system of roads be $900,000,000, this having been received as compensation for hauling an equivalent of 90,000 million tons of freight one mile, the compensation actually received for each ton hauled one mile, is obviously one cent. All that is necessary in order to compute the average revenue per ton-mile then is to know the total freight revenue and the amount of ton-mileage service. Computed in this way the average revenue per ton per mile for the railroads of the United States in 1900 was 0.729 cent. For 1890 this average revenue per ton-mile — that is to say, the average amount received for each ton of freight hauled one mile — was 0.941 cent. For 1880 it was 1.232 cents, and for 1870 1.889 cents. . . .

This mode of comparison by means of the revenue per ton-mile has, as will be observed, one great advantage. It measures the actual return received by the railroads without regard to the published tariff, measuring accurately, therefore, the degree to which such departures from such published rates took place. On the other hand, the average revenue per ton-mile is open to all the objections of a statistical average. It does not represent, either for any railroad by itself or for a system of railroads, the actual payment made for any given service. It covers all kinds of traffic, both through and local, as well as of high and low grade; that is to say, it makes no distinction between service rendered in the transportation of dry goods between local stations and of coal or grain hauled for long distances. Obviously, therefore, it will vary from year to year, or as between different roads, according to the proportions of traffic of different kinds which may happen to prevail at that time. Even on a given road the revenue per ton-mile varies widely as between different classes of

commodities. Thus on the Illinois Central Railroad for the fiscal year 1900 the revenue per ton-mile was 0.136 cent on wheat, 0.790 cent on flour, 4.267 cents on sugar cane, 0.309 cent on soft coal, 1.148 cents on stone and sand, 2.238 cents on furniture, 3.165 cents on merchandise. The average of all commodities carried on this road being 0.935 cent, the latter figure, compounded of such various ingredients, really represents the return for no one of any of the services performed. The same objection to comparisons of revenue per ton-mile holds good as between different roads. Thus, for example, the revenue per ton-mile on a road whose traffic is largely of low grade will be necessarily low. On the Baltimore and Ohio, for instance, for 1899 it averaged 0.39 cent for all the traffic that road carried. This is the lowest average reported by any large railroad system in the United States for that year, except the Chesapeake and Ohio, on which the average ton-mile revenue was 0.362 cent. The reason for this is obviously because the bulk of the tonnage on these roads consists of soft coal, grain, brick, sand, and other commodities on which the freight charges must necessarily be exceedingly low in order that the freight shall move at all. To compare this revenue per ton per mile with a similar figure for a high grade road, such as the New York, New Haven and Hartford, which in 1899 reports a revenue per ton per mile of 1.411 cents, is obviously misleading and fallacious. It does not mean that the latter road necessarily charged more for the same service than the Chesapeake and Ohio. Its higher revenue per ton of freight moved one mile is due in large measure to the fact that much of its tonnage is of high-class merchandise.

The proportion of local to through business upon a railroad or for a system of roads is also an important consideration in determining the average revenue per ton-mile. Obviously it costs much more to handle local business, the terminal expenses being far greater in proportion, while at the same time a larger proportion of the freight moves in small lots at less than carload rates. As illustrative of the difference in revenue to the railroads, the Illinois Central Railroad in 1900 reports an average revenue per ton-mile on through freight of 0.48 cent, while for local freight the corresponding figure is 1.17 cents, the average of both being 0.56 cent. Similarly, upon the Lake Shore and Michigan Southern, the revenue per ton mile for through and local business is, respectively, 0.417 cent and 0.562 cent, giving an average of 0.49 cent. It is apparent from this that any accurate determination of the rate of charge in general must take account of such facts as these. The Southern Pacific or the Chesapeake and

Ohio railroads, with very little local traffic and a business dependent for prosperity almost entirely upon the long haul, will conduct transportation at a materially different figure from roads in densely settled territory. This factor, probably, determines to some degree the difference in average rates per ton mile for different sections of the United States, and certainly it appears in any comparisons with European countries. For New England in 1899 the average revenue per ton mile was 1.14 cents; for the Middle States, 0.57 cent; for the Central and Northern States, 0.8 cent; the Southern Atlantic, 0.68 cent; Gulf and Mississippi, 0.80 cent; Southwestern, 1.02 cents; Northwestern, 0.98 cent, and Pacific roads, 1.03 cents.

The considerations above mentioned are of the utmost importance in any comparison of freight rates, either at different periods or as between different countries. Without knowing the proportions of local and through business, and especially the proportion of high and low grade freight moved long distances, no validity whatever attaches to comparisons of average revenue per ton mile. The development of the last twenty years in the United States has been in favor of a great increase in low-grade traffic. . . .

The assertion is frequently made that, while there has been undoubtedly a progressive decrease in freight rates in the United States during the last thirty years, these decreases have been very unequally distributed. In other words, it has been maintained that the decreased rates have been entirely abnormal upon the through business from interior centres, such as the movement of grain or other food supplies from Chicago to the seaboard; but that, on the other hand, local rates have decreased very little, if at all, in the same period. Coupled with this is the allegation that while through freight rates in the United States are lower than in foreign countries, local rates for short distances are, as a matter of fact, considerably above those prevailing in Europe. This allegation if true is of profound significance, owing to the fact that the larger proportion of freight business throughout the country is of a local character. Thus, for instance, the annual report for 1899 of the New York Central indicates about 4,000,000 tons of through freight in both directions as against five times that volume of way freight in both directions. On the Pennsylvania road it appears that the proportion of local freight was even higher, rising to 90 per cent in 1890. On the Illinois Central for 1900 local freight outweighs through freight in the proportion of 5 to 1, some 84 per cent of the freight carried being of a local character. On the other hand on some roads — such as the Chesapeake and Ohio, for instance

— the opposite extreme is found, competitive freight constituting about four-fifths of the total. It is certain that the definition of local as distinct from through freight differs upon various systems. On the other hand, while the volume is greater, actual earnings on through business vastly preponderate. Fewer tons are moved, but the distances are so much greater that the total charge on each ton aggregates a larger amount. Thus on the New York Central road through freight earning outweighed the way business from a revenue point of view three times over. Through ton mileage aggregated nearly eight times that of local traffic, although at a ton-mile revenue of considerably less than half. The only point to be established here is that local freight rates are of great importance, both to the public from the point of view of rates and to the railroads from the point of view of revenue.

The trend of testimony appears to be that such local rates have decreased very unevenly in different parts of the country. Apparently one of the first and most beneficent results of the enactment of the act to regulate commerce, in 1887, was a reduction of local rates in various parts of the country, in order to bring the rate adjustment into conformity with the long and short haul clause. This was peculiarly the case in the Northeastern or trunk-line territory. It does not seem to have occurred in the Southern States, where the long and short haul principle has never been accepted in its entirety. The most comprehensive report upon the subject concludes that local rates have in various parts of the country, during the last ten or fifteen years, been reduced from 10 to 50 per cent. Returns from various State railroad commissions interrogated by the Industrial Commission upon the subject show highly variable results. From Mississippi it appears that "local freight rates in this State have been materially lowered in the last four years, especially in the lettered classes," while from the adjoining State of Alabama it appears that "local rates on freight have decreased very little in the last five or six years, and have not decreased in proportion to the decrease made in interstate rates." In New England comparison of actual freight rates does not indicate any very considerable reduction, the absence of competition in this section being, perhaps, in part responsible for this result. A comparison of published freight rates in Southern territory, without making allowance for departures from such tariffs, apparently shows a very much smaller reduction than in other parts of the country. It is also apparently true that the reduction of cotton rates in this section, while considerable, has been much less rapid

than that of the rates upon grain from Chicago to the seaboard in either direction. . . .

Summarizing, we may conclude that during the period from 1870 to 1900, on the whole, a substantial and very widespread reduction of freight rates has taken place. This, as might be expected, has been far less marked in local than in through or competitive business. This steady downward movement of freight rates has apparently been interrupted but once by any attempt at a general advance of rates. The railroads of the country in 1894 evinced a concerted disposition to increase freight rates, apparently to compensate for the depressed condition of the industry as a whole. The times, however, did not warrant such action and it apparently did not operate to prevent the continued fall in the average revenue per ton-mile. It remained for the prosperous times of 1900 and 1901 to invite once more such action on their part, and a notable increase in freight rates all along the line has followed as a result.

C. *Decline of the Mississippi River Trade after 1860* [1]

Traffic on the Mississippi River and its tributaries has, for various reasons, declined since the Civil War. At an earlier day this traffic was of supreme importance to the inhabitants of the western states, but with the development of lake commerce and the building of railroads from the Mississippi valley to the Atlantic seaboard it suffered a decline, until at the present time its importance is slight.

It is difficult to summarize statistically the present traffic condition of the Mississippi River system. The reports of the corps of United States Engineers cover specific sections of the river, and are published as made, with no attempt to unify them and eliminate duplications. The Census Report on Transportation by Water in 1906 excluded all logs and lumber in rafts, and confined its statistics to the traffic transported by some form of vessel. Inasmuch as rafting has always been one of the chief sources of reliance for interior river commerce, this leaves the total figures incomplete at a vital point. The total receipts and shipments on the entire system for vessels of over 5 tons, including harbor traffic and car ferries, amounted in 1906 to 31,626,981 net tons. To this should be added, according to the report of Bureau of Corporations, at least 6,000,000 tons of logs and rafts. Of the total freight movement, exclusive of harbor traffic and car ferries, amounting to 19,531,093 tons, more than 56 per cent was coal, and 20 per cent stone and sand. This was an

[1] *A Traffic History of the Mississippi River System.* By Frank Haigh Dixon (Washington, 1909), Doc. 11 of the National Waterways Commission, 64–70.

increase in coal traffic since 1889 of 29.4 per cent, and in stone and sand of 1,147 per cent. Lumber and logs in rafts not being included, it is impossible to determine exactly their movements during these fifteen years, but the decline has probably been fully 25 per cent. The movement of grain, cotton, and iron ore has fallen to insignificant amounts.

A characteristic feature of river transportation, which has been growing steadily more pronounced since 1865, is the predominance of the unrigged craft over the packet steamboat. In 1906, out of a total of 9,622 vessels on the river system, 8,187, or 85 per cent, were unrigged, and of the steam vessels only 390 were employed for the carrying of freight and passengers in regular river service. The remainder were tugs and towing vessels, ferryboats and yachts. By these unrigged craft most of the traffic was transported, the largest part of the commerce being in Ohio River coal. Out of a total of 19,531,093 tons carried, 13,980,368 tons, or 71 per cent, were transported on the Ohio in barges and flats. Aside from bulk traffic in barges, flats, and rafts, the business on the river is almost wholly local and for short distances.

This decline has been the subject of much comment, particularly by those who have observed the extended use to which waterways have been put in many of the European countries. Yet the causes are not far to seek. It should be remarked, however, that they are so interwoven one with the other that it will be somewhat difficult to discuss them separately without apparent exaggeration of the importance of the particular cause as it is considered.

The first cause which suggests itself is that of the influence of competitive agencies, beginning with the eastward movement by lake and canal early in the thirties, and followed by the rail movement in the next two decades. This latter agency was undoubtedly more efficient from the very beginning, because of its greater power to adapt itself to varied traffic requirements. It is flexible in matters of speed, extensibility, terminal adaptability, and the like, and it is, moreover, much more reliable. Consequently, it drew away at once all passenger travel, except excursion business and local or ferry traffic, and all mail, express, and fast-freight business, which deprived the steamboats of their most lucrative sources of earnings, being greatly aided in this endeavor by the interruption to water transportation during the war. But not only was the railway naturally more efficient, but it grew more efficient, relatively, as the years went on, for the

steamboat business stood still or declined after 1860, except in its handling of a few products by barge.

Whether it is true or not, as frequently charged, that railways have secured control of steamboat lines, have purposely kept them inefficient, and have operated them to keep efficient service off the rivers, it is undoubtedly true that they have, . . . reduced rates at water competitive points and recouped themselves elsewhere. In this practice, supported as they are by judicial decree, they have a monopolized advantage from which competing steamboat lines are excluded.

The question whether the rivers any longer exert an influence upon rail rates has been frequently debated, emphatic assertions by the railways that such influence is still potent being met by equally emphatic statements that the river in its present condition is powerless to affect the rail rate. In the preliminary report of the Inland Waterways Commission are included elaborate comparisons of rail and water rates to various points for different classes and kinds of commodities. It would appear from a careful study of the tables bearing upon the Mississippi River situation that the waterway, inefficient as it is, exerts an influence to-day upon the rail rate varying in degree according to circumstances. This is made clear by a comparison of rates charged by railways paralleling the Mississippi north of St. Louis, where water traffic still prevails, with rates charged for similar distances by railways paralleling the Missouri, which is no longer a commercial factor. Rates on this stretch of the Mississippi are lower for the same commodity and distance. Yet when the cost of marine insurance is added to the river rate, and also the drayage charges which so frequently accompany the consignment and receipt of river traffic, it is a question whether railways could not, if they saw fit, absorb most of the water traffic, provided their equipment was adequate. . . .

The lack of development of river equipment, already referred to, has been based in large part upon legitimate grounds — an unwillingness to invest capital in an industry so highly speculative. The risks are not alone those of railway origin, but they arise in part from the natural difficulties of navigation. Obstructions due to snags and bars on all the rivers except the Missouri have to a considerable extent been removed, although they are constantly liable to reappear. The barrier at the mouth of the Mississippi, which until 1878 gave the railways a decided advantage, is now gone. But there still remain many obstacles. Ice stops navigation for many months of each year in the upper river. The swiftness of the current demands a costly

adjustment of business methods to meet the requirements of upstream traffic — a difficulty absent in the Lakes. The shifting and irregular current and the uncertainty of the water supply menace navigation. To such an extent is this true on the upper Mississippi that the one line now operating between St. Louis and St. Paul declines to make season contracts, and accepts shipments for single trips only. Then there are the variations in depth of water, most strikingly shown on the upper Ohio with the January and February floods, when the river sometimes rises at Cincinnati to 70 feet above low-water mark. This variation in water depth is not alone dangerous to navigation, but it prevents the application of capital to the greatest economic advantage. On the Lakes, with an assured depth of water, the largest vessels can be employed and loaded to their capacity. It is not profitable to build vessels on the rivers which can run only in the best stages, and which must lie idle during the rest of the year. But light-draft vessels are not economical in good stages of water. Moreover, these sharp and sudden variations in the stage of water have made fixed wharves impossible and have compelled the use of the less efficient floating dock. In low stages the cost of loading and unloading is sensibly increased in many places by reason of the steep and high river banks.

But navigation is hindered not alone by variations in stage of water due to floods and droughts, but also by the normal difference in depth of the different sections of the river system. The lack of development in the past of any through traffic from the upper Mississippi to New Orleans, and the persistence of the costly practice of transfer at St. Louis, have been due to this difference in depth of the lower and upper river, and to the consequent difference in draft of vessel employed. It was to meet this difficulty that the barge system was introduced, whose units, similar to railway cars, could be dropped or attached at will, and handled on different stretches of river without the necessity of transfer of load.

Although it must be admitted that from a navigation standpoint the condition of the Mississippi is much superior to what it was in the days of its commercial prosperity, yet much remains to be done and much which is once done has to be frequently repeated. The destruction of banks due to shifting channels, and the fact that the Missouri uses the lower Mississippi as a dumping ground, make continuous dredging necessary, and any lessening of vigilance in this direction through failure of congressional appropriations is promptly punished by a serious impairment of the navigability of the stream.

Yet however serious navigation difficulties may appear to us, they can not, except to a small degree, explain the decline of river commerce. For in spite of all obstructions, we possess free waterways which are in many respects superior to those of Europe; yet we have but a fraction of their tonnage. A dead low-water channel of $4\frac{1}{2}$ feet prevails throughout the year from St. Paul to the mouth of the Missouri. Four feet draft prevails on the Missouri at low water as far as Kansas City. From St. Louis to Cairo there are only a few days in the year when a boat drawing 8 feet can not operate freely. Below Cairo for 840 miles there is a 9-foot depth during low water, and for the last 270 miles boats of 25 to 30 feet draft can operate. On the Ohio from Cairo to Pittsburg, there is a 9-foot depth at low water. In comparison with these figures it should be noted that much of the canal and upriver boat traffic of Europe is performed on 1 meter (3.28 feet) draft; most of it is done on 2 meters (6.56 feet) draft and 10 feet draft is exceptional. Hence it is lack of uniformity in different sections of the river, and a resulting inability to use equipment to the best advantage, rather than the shallowness of the streams which must be accounted the important navigation obstacle.

In the third place, whether, as a result of the two causes just mentioned, railway competition and navigation obstacles, or whether, because of a lack of initiative on the part of river interests after the war, the steamboat business has been wholly lacking in the administrative organization necessary to cope with so superbly organized an industry as the railway. Capital has kept out of it. The river steamboat, except that it has changed from a passenger to a freight carrier, is the same craft as always. As late as 1906, out of a total of 1,435 steam vessels on the Mississippi River system, 1,358, or 95 per cent, were of wood. The old inefficient "roustabout" labor is still employed, and no attempt whatever has been made to introduce mechanical appliances for loading and unloading. There are very few satisfactory wharves and docks, many of the landings being made on the river bank, and the goods dumped on shore without cover. As the rivers are at the lowest levels, goods must be hauled uphill to reach a place of sale. Good natural landings are few, and artificial ones are too expensive to be within the reach of small communities. Thus the terminal expenses as compared with the more flexible railways are very heavy.

Adequate terminal facilities are in very few instances owned or controlled by water lines. . . .

In many cases all satisfactory terminal property has been acquired

by the railways. For example, portions of the river front at Pittsburg, New Orleans, St. Louis, and Vicksburg are owned by railway corporations. The primary purpose of the railways is not to check the development of water transportation, but to secure desirable land for switch tracks and yards, yet its effect upon the development of steamboat traffic is disastrous.

Furthermore, nearly half of the steam vessels operated on the Mississippi, representing, however, only about one-quarter of the tonnage, are owned by individuals, and are run independently with very little thought of securing united action toward better organization of river traffic. This makes it impossible for shippers to arrange for through handling of goods. Repeated rehandlings by irresponsible steamboat captains cause damage to the goods, and make location of responsibility for the damage difficult and the settlement slow and costly. Practically the only traffic which is well organized is that of coal on the Ohio, and this is largely under the control of a single corporation. Of the total tonnage in 1906 of unrigged vessels, 96.6 per cent was owned by corporations.

Finally there was and still is a fundamental cause of decline of river commerce to be found in the relation of traffic movement to traffic agencies. So long as wheat and corn were produced near the waterways and could be disposed of at markets located on the rivers, traffic by river continued; but so soon as either of these conditions was no longer present, the railway began to take the business. If grain was shipped from a river port and required transfer to rail for delivery at a primary market, like Chicago, the expense of transfer and the lack of all facilities for satisfactory handling turned the traffic at its source to the railways. When grain began to be produced away from the waterways, it had to be loaded at first into railway cars, and once in the cars it remained there until it reached its market. The movement of the wheat area northwestward to a region west of Lake Superior and the advance of the corn area westward enhanced this tendency, and the railways encouraged it both by the provision of suitable facilities for storage and handling and by the adjustment of their rates. The effect upon the Mississippi River is strikingly shown by the fact that although in the fifties there were many towns with prospects of rapid and successful development, yet at the census of 1900 there was not a river town from St. Paul to St. Louis with 40,000 people and only three, Quincy, Davenport, and Dubuque, with over 25,000 inhabitants. The same principle may be illustrated in other parts of the system. For example, Madison and New Al-

bany, Ind., both declined in population between 1890 and 1900, and neither of them had 25,000 people in the latter year, whereas Indianapolis, pre-eminently a railway center, which in 1840 had less population than either of the towns mentioned and in 1850 almost exactly the same number, had in 1900 a population of 169,000.

So far as export business by way of New Orleans is concerned, the long roundabout journey, combined with lack of satisfactory steamship facilities at New Orleans, has had its influence in turning traffic eastward by rail.

The kind of business which has most satisfactorily developed on the Mississippi River system has been that transported in the form of rafts, the lumber business, and that handled by barges, of which coal is the best example. The former flourished on the upper Mississippi, and is still prosperous on the lower Mississippi and the Ohio and tributaries, because, as already indicated, it can be slipped into the water and carried to its market with little expenditure of labor and with no necessity of transfer. So soon as the forests were cut off on the banks of upper Mississippi tributaries, rafting began to decline, and a rapidly increasing proportion of lumber and log output was carried by rail.

The Ohio River coal traffic illustrates peculiarly well the kind and method of business to which the river system is at present adapted. In this industry, to be sure, are some of the advantages which are lacking in any other, namely, administrative organization, mechanical loading appliances, and the highest development of barge traffic. But in addition to all this, coal can be loaded direct from the mines into the barges and can then be transported without any rehandling to its destination, which is the river steamboat, the ocean-going steamship, the sugar plantation on the bay, or the railway coal yard on the river bank. In other words, the Mississippi can at present handle traffic successfully which begins and ends within its banks, but traffic requiring transfer to the railway at any point on its course will have a tendency to resort to the railway for the entire distance. Whether this situation is due to a control of terminal and transfer facilities by the railways and a refusal to pro rate with the waterway, whether it is due to lack of initiative on the part of river interests in developing transfer facilities, or whether it is due to the greater cheapness of an all-rail haul, the fact remains that carriage involving transfer no longer makes use of the Mississippi River system.

A recent special report of a board of United States engineers calls attention, in explaining the insignificant commerce of the lower

Mississippi, to the fact that the population in sections bordering the river is as low as 86 to 24 per square mile, including cities, and that in a total length of about 1,265 miles there are only seven towns or cities of over 10,000 population and only 23 of over 5,000 population. In reply to this and in answer to the statements which picture the declining condition of river commerce the advocates of waterways insist that if they were given an improved channel commensurate with the needs of business, traffic would come and the thinly settled sections along the rivers would be built up. They also contend that even if commerce were not developed by the waterway the existence of a waterway ready for use would so affect railway rates as amply to justify the expenditure for construction. This last contention may be dismissed with a few words. No expenditure by the National Government would be justified for the construction or improvement of a useless or idle waterway unless the saving could be clearly demonstrated in advance. Such a demonstration would, in the nature of things, be quite impossible, for it is evident that the comparative attractiveness of rail and water routes is not a simple question of comparative rates. A variety of factors which can be summed up in the word "serviceability" actually determine the method of shipment, and such factors can not be predetermined. If the purpose is to reduce railway rates, there are more direct and less costly methods of accomplishing this result.

The influence of a waterway in developing traffic is somewhat problematical, and no final answer can be given to the claims of those who insist that trade will follow the lock and the dam. Although there are real obstacles at present to successful navigation, as already noted, nevertheless it is difficult to understand why the commercial interests, if they are so eager for a waterway, have not made better use of existing facilities. The inference is a natural one that the trouble lies elsewhere than in the condition of water navigation.

But it must be admitted that there is some basis for the contention that good traffic facilities develop traffic. The truth of this has been often demonstrated by the railways. The waterway advocates have reason to count upon a repetition at least in part of railway experience, but hardly to the extent claimed by some of the extremists among the supporters of the policy. They have, however, the right to a reasonable assurance that such improvement work as is now being carried on and such plans as have been undertaken for further betterment shall be continuous, in order that such investments as they may make

in floating equipment shall not be lost by an abandonment of improvement work.

To four general influences, then, may be assigned the decline in Mississippi River commerce: First, competition of rail and lake; second, natural obstructions to navigation; third, lack of administrative organization of the water transportation business; and fourth, certain fundamental principles of traffic movement which under existing conditions work to the disadvantage of water carriage.

D. *The Future of Rail and Water Transportation* [1]

Mr. James J. Hill, one of the best known railroad men of the country, gave it as his opinion in 1908 that there was no antagonism between railroads and internal waterways. He said further that the ideal situation was one in which each of these channels of communication would supplement the other.

. . . The phrase, "The Future of Rail and Water Transportation," indicates their close correlation. I am glad to emphasize right here the fact that their relation is one of harmony, of helpfulness and of co-operation.

There is no reason from the railway standpoint why it should be otherwise. The trunk lines between Chicago and New York were built and have created their enormous traffic in face of the competition of the Erie canal. St. Louis, one of the important centers of railroad business on this continent, has the Mississippi at her service. On the Ohio is some of the cheapest water carriage in the country. Its cost in 1905 is reported as .76 of one mill per ton per mile to move freight by river from Pittsburg to Louisville, and .67 of one mill per ton per mile from Louisville to New Orleans. Rates much lower than these are made on barge tows during the season. This is a cheap and convenient route by which the coal of Pennsylvania and Ohio may be moved to the factories of St. Louis. Coal can be shipped profitably by water if anything can. What is the fact? Of a total of 8,743,047 tons of coal received at St. Louis in 1907, just 155,470 tons were carried by boat. A large part of this comes from local mines. Every pound of the 1,155,645 tons shipped out went by rail. And of all commodities received at and shipped from that city, amounting in 1907 to nearly 48,000,000 tons, just 368,075 tons, or less than .79 of one per cent., were brought in or sent out by water. The chairman of the freight committee of the New Orleans Board of Trade says, in the last report of that body: "It is a well-known fact that the

[1] *Letter of James J. Hill.* Read at The-Lake-to-the-Gulf Deep Waterway Convention (Chicago, October 7th–9th, 1908), 1–6, 12–6, 24–6.

steamboats plying out of this port find a number of prominent railroad competitive points on their route. It is also, we regret to say, a positive fact that our boats are accorded but little business shipping out of this city to said points. Practically the only out-bound freights that are shipped on the boats are such as cannot be delivered by a railroad." Galveston, with no such waterway at her doors, exported 14,172,071 bushels of wheat in 1907, as against 5,496,935 for New Orleans. Up to this time the river has been unable to compete with the railroad, notwithstanding its lower charges, because of the rapidity and certainty with which the latter carries and delivers freight. In the year 1855–56 the domestic exports from New Orleans amounted to $80,000,000, and were practically all carried by water. Not in recent times has the commerce of the lower river reached $3,000,000, although the total imports and exports of New Orleans in 1907 were over $200,000,000. These figures expose the absurdity of the theory that the railroads need feel either jealousy or fear of the waterway.

I have shown the failures of certain waterways as competitors of rail lines. Equally interesting is their experience with a waterway which is a glorious success and already the most wonderful thoroughfare for steam craft in the world. On the Great Lakes 97,000,000 tons were carried last year. The volume of lake commerce is always growing. The registered tonnage of the "Soo" canal in 1907 was over 44,000,000 tons. Over 60,000,000 tons passed the Detroit river in 1906. The ore alone carried last year by the lake route amounted to over 900 pounds for every man, woman and child in the United States. The tonnage passing through the Suez canal in the same year was but 14,728,434. But while the phenomenal growth of lake business and reduction of the lake rate, which was 22.36 cents per bushel by lake and canal from Chicago to New York in 1867 and 6.64 cents in 1907, have taken place practically within the last twenty-five years, the railroads running west and northwest from Buffalo and Chicago have not suffered. On the contrary, in this territory traffic has increased with amazing rapidity; and the capacity of the railroads is taxed to handle business that cannot or will not use other routes.

Every intelligent railroad man knew this long ago. He dismissed fear of the waterway as a competitor; not because it is either unimportant or powerless, but because the two carriers are supplementary instead of mutually destructive. He foresaw the day, when under normal business conditions the railroads would be unequal to

the work demanded of them; when the assistance of the waterway would be valuable, both as a carrier and as tending to relieve congestion by increasing the number and extending the geographical and necessary distribution of terminals. And he has worked to that end. You cannot find a man eminent in railroading in this country to-day who is not also an ardent advocate of waterway improvement. Let us start right by dismissing this bogey of envy and baseless opposition. Senator Knox has stated the case correctly in these terse words: "European experience has established the law that with waterways carrying the slow and heavy freights which most congest the railways and on which their return is most narrow, the growth of industry and population more than compensates them in the growth of their high-class freight, express, mail and passenger traffic."

Understanding, then, that railroads and waterways are to work together for the development of this country and the betterment of its people, how can each be aided most in discharging its vast and valuable functions in the national economy? I have already stated on different occasions the determining facts bearing upon the future of railroading in this country. The passage of time only intensifies the difficulties of the situation. Two years ago I pointed out that, in the ten years between 1895 and 1905, the railroad mileage of the country had increased but 21 per cent., while the passenger business had grown 95 per cent. and the freight business 118 per cent. The latest report of the Interstate Commerce Commission carries an even graver warning. By the decade ending in 1907, the increase of mileage as compared with 1897 had crept up to 24.7 per cent.; but in the same time the increase of passenger business had leaped to 126.1 per cent., and that of freight traffic to 148.7 per cent.

The country was saved from a complete traffic breakdown only by increasing operating efficiency after it had already been raised apparently to the limit. Density of traffic might have been thought to have reached its maximum in 1906, when every railroad performed prodigies in order to do the work required of it. Yet the increase of density in 1907 on the entire railroad system of the country was 69,718 freight tons for every mile of line, or about 20 tons per mile for every day in the year. I have for years been urging that the building up of a transportation machine commensurate with the growth of the country should not only be permitted but encouraged in the only two possible ways: First, by encouraging capital to invest in railroad construction, instead of scaring it away by hostile and unjust legislation; and, second, by a comprehensive and

rational system of waterway improvement. There is no other way now, nor will there ever be, by which the business of the country can be done. . . .

. . . It will be the *deep* waterway that helps business, just as it is the deep harbor that has built up trade and lowered rates by making it possible to run boats of greater tonnage. I said a year ago to the members of the National Rivers and Harbors Congress that they should work for a fifteen-foot channel in the Mississippi and that eighteen or twenty would be twice as good. If you have a waterway, you want it deep enough to do business. A barge that carries only 1,000 tons cannot compete with a box car. With a steamer carrying 10,000 tons you have beaten it. Twenty years ago the largest carriers on the lakes that could pass through the old "Soo" canal, with its fourteen-foot locks, were about 3,000 tons. To-day an ordinary load is 10,000 or 12,000 tons. The canal has been deepened to twenty-one feet, and with what result? The commerce of the Great Lakes is one of the wonders of the world. Twenty years ago Duluth was a little town with a promising local trade only. To-day it is one of the great shipping ports of the world, with unlimited possibilities of expansion. For 1905 the total tonnage of New York harbor, foreign and coastwise, was 30,314,062. For 1906 Chicago's tonnage was 15,638,051. That of Liverpool and Birkenhead in 1906 was 16,147,856, and London's in 1905 was 25,867,485. The government report for the year 1907 gives the tonnage of the Duluth-Superior harbor at 34,786,705, with a valuation of $287,529,705. Deep harbors on the lakes, admitting the use of big freighters, have made such growth in all our lake cities possible. The first principle of river improvement, then, is that these shall be made deep waterways; real and not useless arteries for commerce. . . .

Waterways should be made as other great works are created. The first railroads did not begin in the heart of the country and end nowhere. They were lines between important centers and terminal points; and extensions, branches and feeders were added as needed. That is what waterway improvement needs. Locate your trunk lines first. Open a way to the sea by the biggest, freest outlet. Push the work as nature indicates, from the seacoast up the rivers. And this, of course, should be done with ample resources according to a general scheme which will include reservoirs on the head waters of the main stream and as many of its tributaries as may be necessary to prevent floods and maintain a deep channel in the dry season; together with such canalization of the river, or canal construction

parallel with its course, as will assure a sufficient and permanent channel for boats of the largest size during the season of navigation.

There would be general agreement, probably, that the lower Mississippi, from New Orleans to St. Louis, should first be opened to navigation; and that the deep water connection with the lakes should come next. And it is as important that the order of these improvements be not reversed as it is that you do not set the water running in your bathroom before you have provided an escape pipe and a sewer connection. The Mississippi basin contains two-fifths of the area of the United States; more than half its population lives in States touching the navigable portions of the great river and its tributaries, and its products feed the world. We have really done nothing permanent yet to make it a navigable river. Protection of caving banks, revetment, dredging and snag-pulling are only temporary expedients. The river is not and cannot now be used as a carrier ought to be if it is to play a part in national transportation. In 1888 there were 3,323 boats and barges, carrying 597,955 tons of freight, besides lumber and logs, arriving at St. Louis. In 1907 there were 1,330, carrying 289,575 tons. The departures in 1888 numbered 2,076, with 510,115 tons; in 1907 they were 931, with 78,500 tons. There is small reason to wonder at the decline when the government record of river stages shows the lowest gauge, which, of course, governs the whole steamboat business, to have been four feet and three-tenths in one month of 1907, and for six months to have been no higher than eight and one-tenth feet at St. Louis. Yet in the last forty years the government has spent $250,000,000 on the Mississippi and its more important branches. . . .

The future of the waterway as a factor in transportation cannot be injured except by folly. The essentials for developing its highest possibilities are few and simple. Let me, for clearness, repeat them. First, a permanent commission, authorized to expend appropriations in its discretion upon national waterways in the order of their importance. Second, a comprehensive plan including the classification of rivers and canal routes in the order of their value, including also such reservoir and slackwater work as may be required for the working out of each project to success. This plan in its essentials to be adopted by the commission at the outset and adhered to without interference by Congress or any department. Third, insistence upon the development of trunk lines first, and upon a depth that will make these real carriers of commerce, able to aid the railroads in their staggering task and to transport bulky freight expeditiously and

economically. Fourth, a liberal standing appropriation annually for the commission's work until its plans shall have been carried out over the whole country; and a refusal to ask the pledge of the nation's credit for a single dollar of this, which is properly our work.

V. Communication

A. *Development of Telegraph and Telephone Systems, 1844–1907*[1]

The extension of the telegraph service to all parts of the country has tended to eliminate distances and thus to facilitate business. Scarcely a village is without its telephones, and even thousands of farmers have telephonic connection with each other and with adjoining towns and cities.

The first telegraph line in the United States was opened for business in 1844, and thirty-two years later the telephone was introduced. In the early stages of its development the telephone industry was associated with the telegraph industry, but the two have now long been distinct, and the telephone is to some extent a competitor of the telegraph for the business of long-distance communication, although recently the leading telephone company has acquired a large stock interest in one of the leading telegraph companies. At the census of 1880 the telegraph companies reported the operation of 291,213 miles of wire as compared with 34,305 miles reported for the telephone companies. By the census of 1902 the amount of wire for the telegraph systems had increased to 1,318,350 miles and that for the telephone systems to 4,900,451 miles. Thus in 1902 the mileage of wire devoted to the transmission of telephone messages was almost four times as great as that used for telegraph purposes.

Both industries developed rapidly between 1902 and 1907, and by the end of that period the mileage of single wire devoted primarily to the telephone business was eight times as great as the mileage used for the commercial telegraph business.

In the amount of business done in 1907, the amount paid in salaries and wages during the year, and the capital invested, the telephone business was more than three and one-half times as extensive as the telegraph industry, and during the year it furnished employment for more than five times as many persons.

In 1907 a total of 14,570,142 miles of wire was in use for the transmission of commercial messages, and of this total, 12,999,369 miles, or 89.2 per cent, were used primarily for telephone messages,

[1] Department of Commerce and Labor, Bureau of the Census. Special Reports. Telephone: 1907 (Washington, 1910), 15–18.

and 1,570,773 miles, or 10.8 per cent, for the telegraph business. The telephone business has increased more rapidly than the other branch of the industry. Between 1902 and 1907 there was an addition of 8,098,918 miles of wire for the use of the telephone systems of the country as compared with an increase of 259,611 in the mileage of owned and leased wire for the use of commercial telegraph systems. The increase in the wire mileage of the telephone systems during that period of five years is more than six times as great as the total amount of existing wire that has been added to the telegraph business since the date when the first statistics concerning the industry were gathered.

The development of the long-distance telephone system and the increasing use by railway companies of the telephone for the dispatch of business have necessarily had some effect on the extension of the use of the telegraph. Naturally the increase in the use of the telephone has greatly outdistanced the increase in the use of the telegraph. . . .

At the close of 1907 the amount of wire in use by the telephone systems of the country exceeded that in use in 1902 by more than 8,000,000 miles, and the other leading items showed proportionately large increases. It is especially interesting to learn that the industry gave regular employment to 65,417 more persons in 1907 than it did five years earlier, and that the amount expended in salaries and wages was greater by $32,023,506 in 1907 than in 1902.

Until recent years the field of operation of a telephone system was restricted to a comparatively small area, but the introduction of the long-distance lines and the arrangements for toll service between neighboring companies have made communication possible between widely separated sections of the country with a facility which of itself has contributed to increase the business of the industry.

Naturally the most extensive equipment and the greatest amount of business are found in the states that have the largest population. . . .

The industry is largely concentrated in the populous North Atlantic and North Central states, and the greatest amount of increase between the years 1902 and 1907 in wire mileage, telephones, and business is shown for these states. More rapid rates of increase occurred in other sections, however, and the largest percentages of gain for wire mileage are shown for the Western, South Central, and South Atlantic states, where, as a rule, the telephones are farther apart than in the other divisions. The Western states had the largest percentages of increase also in the number of telephones and messages or talks. In accepting the percentages of increase the relative size

of the totals involved should be given due weight. Between 1902 and 1907 New York had the greatest increases in the number of telephones and in the miles of wire, the gains being 438,172 and 1,006,451, respectively; whereas the corresponding increases for the entire Western division, 332,854 telephones and 898,411 miles of wire, are less than those for the single state of New York. Yet the rate of increase for telephones in the Western division is nearly equal to that for New York state, the rates being 160.5 per cent for the division and 177.2 per cent for the state; while the rate of increase for miles of wire in the Western division, 293.8 per cent, far exceeds that for New York state, 161.4 per cent.

In 1907 eleven states had over 200,000 telephones each, while in 1902 only three states — New York, Ohio, and Illinois — had this number. . . .

B. *The Postal System, 1911* [1]

The post office system has extended its services to every part of the country, until improvements on any large scale seem scarcely possible. The fastest trains carry the mail, city routes are covered several times daily and even hundreds of thousands of country homes have their mail brought direct to their doors daily. The parcels post has become a reality and those who objected to the Government assuming such function have been silenced by its success. Conditions as they were in 1911 were described by the Postmaster General as follows:

A POSTAL SURPLUS

For the first time since 1883 the annual financial statement of the Post Office Department shows a surplus instead of a deficit. The revenues for the fiscal year ended June 30, 1911, amounted to $237,879,823.60 and the expenditures to $237,660,705.48, leaving a surplus of $219,118.12. At the beginning of the present administration in 1909 the postal service was in arrears to the extent of $17,479,770.47, which was decidedly the largest deficit on record. In the brief space of two years this deficit has been changed into a substantial surplus.

EXTENSION OF THE SERVICE

The wiping out of the deficit has been accomplished without curtailment of postal facilities. On the contrary, important extensions have been made in every branch of the service. Since the opening of the present administration there have been established 3,744 new post offices, delivery by carrier has been provided in 186

[1] *Annual Report of the Postmaster General of the United States, 1911* (Washington, 1912), 15–17, 19, 21–22.

additional cities, and 2,516 new rural routes, aggregating 60,679 miles, have been authorized. Meanwhile the force of postal employees has been increased by more than 8,000. In compensating such employees the department follows a liberal policy. Last year the total amount expended for salaries was approximately $14,000,000 greater than two years ago. The average annual salary has been increased from $869 to $967 for rural carriers, from $979 to $1,082 for post-office clerks, from $1,021 to $1,084 for city letter carriers, and from $1,168 to $1,183 for railway postal clerks. Thus a marked extension of the postal service and higher compensation for its employees have gone hand in hand with a vanishing deficit.

POSTAL SAVINGS SYSTEM

An important event of the year was the successful organization of the Postal Savings System. On January 3, 1911, depositories were opened experimentally at a single post office in each one of the 48 States and Territories. After a careful test for four months at these offices the system was rapidly extended, and now comprises practically all of the 7,500 presidential post offices. Preparations are being made to establish the system also in about 40,000 fourth-class offices that do a money-order business. . . .

Postal savings deposits have kept pace with the extension of the system. Amounting at the end of the first month to only $60,252 in the 48 experimental offices, they increased in a half year to $679,310, and now, after 11 months of operation, have reached a total of $11,000,000. This sum has been distributed among 2,710 national and State banks, where it is protected by bonds deposited with the Treasurer of the United States.

Assuming that the Postal Savings System will be extended to additional offices in accordance with present plans, and that with this extension the deposits will continue to increase at the same rate as now, it is confidently predicted that from forty to fifty million dollars will have been taken in by the close of the current fiscal year. At that time the income of the system should be sufficient to pay all operating expenses, including those incurred at the central administrative office.

PARCEL POST

Now that the successful operation of the Postal Savings System is assured, it is hoped that Congress will promptly authorize the establishment of a parcel post. The benefits of this service are widely

enjoyed by the people of foreign countries and should be provided in the United States. The department not only renews its recommendation of last year for legislative authority to start a parcel post on rural routes, but asks a similar authorization for the introduction of such a service in cities and towns having delivery by carrier. After the organization of a parcel post on rural routes and in the City Delivery Service is completed, its extension to include railway and other transportation lines can be more readily accomplished without impeding the handling of the ordinary mail. In establishing a parcel post service great care should be taken not to cause a congestion of the mails and thus embarrass the present operations of the post offices. An attempt to absorb immediately under one sweeping order the entire parcel business of the country would be a dangerous experiment for our postal service. That the difficulties of such a plan may be avoided the department favors a more gradual introduction of a parcel post in the manner proposed. To bring the issue clearly before Congress, three items of $50,000 each have been inserted in the estimates of the postal service, two of these items to cover the initial expense of introducing a parcel post on rural routes and in the City Delivery Service, respectively, and the third item to meet the cost of an investigation looking to the final extension of the service to the railways and other transportation lines. If Congress will grant without delay the desired authority and provide the necessary appropriations it is believed that before the end of another year a satisfactory parcel post can be organized on rural routes and in cities with a carrier service, thus paving the way for the final step in the organization of a general parcel post. . . .

SHIPMENT OF PERIODICALS BY FREIGHT

Among the measures adopted by the department during the year that will materially reduce the annual cost of carrying second-class mail is that of shipping monthly, semimonthly, and bi-weekly periodicals by fast freight. The plan is being put into successful operation without serious inconvenience to publishers or subscribers. It will not only result in a large saving to the Government by utilizing a less expensive method of shipment, but what is still more important to the business interest of the country it will insure a quicker handling of first-class mail. By taking out of the railway post office cars the heavy periodical matter formerly sorted en route a more rapid distribution of letters is made possible. Thus the new method of shipping certain periodicals will mean greater efficiency in the handling

of a class of mail that is far more important to the public. The saving from the new plan when in full operation will amount to several million dollars a year. . . .

CITY DELIVERY SERVICE

Important changes were also made during the year in the city carrier service. A reduction in the number of deliveries for the residential districts of certain cities resulted in some misapprehension as to the purposes of the department. In each case the object was to permit the redistribution of the carrier service so as to make it more effective as a whole. The curtailment of too frequent deliveries in residential sections enabled the department to provide more deliveries in business districts. This policy is almost universally approved by business men, who are willing to have fewer deliveries at their residences in order to obtain more frequent service at their places of business. As already pointed out, the city delivery service has been greatly extended in the last two years, during which period letter carriers have been placed on duty for the first time in 186 additional cities.

VILLAGE DELIVERY SERVICE

Delivery by letter carrier, except on rural routes, is confined under existing law to cities and towns having as much as 10,000 population or annual post-office receipts amounting to $10,000 or more. Thus the residents of many small towns and villages are obliged to go to the post offices for their mail, while delivery service by carrier is afforded both to the inhabitants of cities and to people residing along the rural routes in sparsely settled country districts. The carrier delivery system is now in operation in 1,541 cities, serving an urban population of about 45,000,000, while rural carriers deliver mail on 42,000 routes that reach about 20,000,000 people. This leaves about 25,000,000 people in the United States, most of whom live in small towns and villages, without any form of mail delivery. The establishment of such a service in these towns and villages under the present law governing the employment and compensation of city letter carriers would be hardly feasible because of the heavy expense involved. It is believed, however, that in many villages not now entitled to free delivery a comparatively small allowance would enable the postmasters to employ the assistance necessary to carry mail to the residences. . . .

RURAL MAIL SERVICE

The consolidation of the rural delivery and star-route services, . . . has proved to be most beneficial. It has enabled the department to extend mail delivery to many thousands of additional patrons by a rearrangement of established routes with little increase in the annual rate of expenditure. Much needless duplication of service, which it was difficult to prevent with two independent systems of rural delivery, has been eliminated since their consolidation. Under the new plan of organization the rural mail service is being rapidly extended.

CHAPTER XX

FINANCIAL HISTORY, MONEY AND BANKING 1860–1915

I. Financing the War

A. *Extent and Character of Government Receipts and Expenditures, 1860* [1]

The receipts and expenditures of the government at the outbreak of the Civil War were meager as compared to those during the war period. Thus receipts for the fiscal year 1860 approximated $80,000,000, and expenditures were only a little less. The public debt, which was something like $70,000,000, carried an interest charge of about eleven cents per capita. The government had but one important source of revenue, the tariff. A detailed statement of both receipts and expenditures follows:

Treasury Department,
December, 4, 1860.

SIR: In compliance with the act of Congress entitled "An act supplementary to an act to establish the Treasury Department," approved May 10, 1800, I have the honor to submit the following report:

On the first day of July, 1859, being the commencement of the fiscal year 1860, the balance in the treasury was		$4,339,275.54
The receipts into the treasury during the fiscal year 1860 were as follows:		
For the quarter ending September 30, 1859:		
From customs	$15,947,670.62	
From public lands	470,244.62	
From miscellaneous sources	379,650.61	
From treasury notes, per act December 23, 1857	3,611,300.00	
From loan, per act June 14,1858	210,000.00	20,618,865.85

[1] *Treasury Report, 1860* (Washington, 1860), 3–4, 6–7.

For the quarter ending December 31, 1859:		
From customs	10,785,849.93	
From public lands	445,535.36	
From miscellaneous sources	149,392.76	
From treasury notes, per act December 23, 1857	4,064,500.00	
From loan, per act June 14, 1858	60,000.00	15,505,278.05
For the quarter ending March 31, 1860:		
From customs	14,962,783.68	
From public lands	505,591.83	
From miscellaneous sources	245,447.36	
From treasury notes, per act December 23, 1857	5,588,200.00	
From loan, per act June 14,1858	1,110,000.00	22,412,022.87
For the quarter ending June 30, 1860:		
From customs	11,491,207.64	
From public lands	357,185.90	
From miscellaneous sources	236,273.58	
From treasury notes, per act December 23, 1857	6,131,200.00	18,215,867.12
Making the aggregate means for the service of the fiscal year ending June 30, 1860		81,091,309.43
The expenditures during the fiscal year ending June 30, 1860, were as follows:		
For the quarter ending September 30, 1859		20,007,174.76
For the quarter ending December 31, 1859		16,025,526.69
For the quarter ending March 31, 1860		20,377,502.70
For the quarter ending June 30, 1860		21,051,898.57
		77,462,102.72
Which amount was applied to the respective branches of the public service as follows:		
To civil, foreign intercourse, and miscellaneous services		27,969,870.84
To service of Interior Department (Indians and pensions)		3,955,686.59
To service of War Department		16,409,767.10
To service of Navy Department		11,513,150.19
To the public debt		17,613,628.00
		77,462,102.72

Estimates for the fiscal year from 1st July, 1861, to 30th June, 1862.

Estimated receipts from customs	$60,000,000.00
Estimated receipts from public lands	3,000,000.00
Estimated receipts from miscellaneous sources	1,250,000.00
Estimated balance in treasury on 1st July, 1861	245,891.58
Aggregate estimated means for fiscal year 1862	64,495,891.58
Estimated expenditures from permanent appropriations	9,626,386.20
Estimated expenditures from balance of former appropriations not before required	12,198,112.62
Estimates now submitted by the executive departments for appropriation by Congress	46,539,227.29
Aggregate estimated expenditures for fiscal year 1862	68,363,726.11
Showing a deficit of estimated means for the service of the fiscal year ending 30th June, 1862, of	3,867,834.53

The suggestions above made, as to not drawing from the treasury during the year the whole amount of the appropriations authorized by law, will apply to these estimates, so that instead of the above deficiency of $3,867,834.53, there will probably remain [in] the treasury on the 1st July, 1862, a balance of about $8,000,000.

B. *Money Cost of the Civil War, 1869* [1]

The money cost of the Civil War was stupendous in its magnitude, so much so that few if any of the public men of the time would have believed at the beginning of the conflict that such a cost would have been borne by the people. It was borne, however, with little apparent difficulty and without much complaint, for the north prospered in spite of the War. The million or more northerners in the field required immense quantities of food and equipment, and their places had been taken by improved machinery. The money cost of the war was reported on in 1869 by the Special Commissioner of the Revenue, David A. Wells, as follows:

It would seem to be desirable at this point, now that all feeling in regard to the subject from its bearing on political questions has apparently passed away, to place upon record the exact cost of the war, as nearly as the same can be determined. With this object, attention is asked to the following exhibit:

The amount of outstanding national indebtedness March 7, 1861, was	$76,455,299.28

[1] *Report of the Special Commissioner of the Revenue, 1869* (Washington, 1870), IV–VI.

During the four years of war which terminated in April, 1865, (April 1, 1861, to April 1, 1865,) the actual receipts of the treasury were as follows:

From internal revenue	$314,337,317.01
From customs	280,861,618.45
From lands	1,812,083.80
From direct tax	4,668,259.31
From miscellaneous sources	74,120,413.37
Total receipts	675,799,691.94

The receipts of revenue from April 1, 1865, to June 30, 1869, inclusive, during which period the larger portion of the expenditures has been directly in consequence of the war, were as follows:

From internal revenue	$967,207,221.41
From customs	729,991,875.97
From lands	7,402,188.28
From direct tax	9,017,217.30
From miscellaneous sources	194,949,122.13
Total receipts	$1,908,567,625.09
The amount of outstanding indebtedness, less cash and sinking fund in treasury, June 30, 1869, was	$2,489,002,480.58
Deducting from this the amount of outstanding indebtedness at the outbreak of the war ($76,455,299.28,) we have, as the sum borrowed for war purposes and not repaid out of the receipts above indicated	2,412,547,181.30
Making the total expenditure (loans and receipts) in eight and a quarter years of war and its effects	4,996,914,498.33
Deducting the amount which, but for the war, might be taken as the average expenditure of the government during this period, say one hundred millions per annum	825,000,000.00
We shall have	$4,171,914,498.33

which sum represents the cost of the war to the United States government down to June 30, 1869.

To this sum should be added the value of the pensions now paid by the Government on account of the war, if the same were capitalized. This, at eight years' purchase of the present annual payment, would amount to about *two hundred millions*.

But this aggregate, however large, must still further be increased by other items if we would reach the true cost of the war to us as a people, the above representing only the expenditures of the national government.

These additional charges are substantially as follows:

Increase of State debts, mainly on war account	$123,000,000
County, city, and town indebtedness increased on account of the war, (estimated)	200,000,000
Expenditures of States, counties, cities, and towns, on account of the war, not represented by funded debt, (estimated)	600,000,000
Estimated loss to the loyal States from the diversion and suspension of industry, and the reduction of the American marine and carrying trade	1,200,000,000
Estimated direct expenditures and loss of property by the Confederate States by reason of the war	2,700,000,000

These estimates, which are believed to be moderate and reasonable, show an aggregate destruction of wealth, or diversion of industry which would have produced wealth, in the United States since 1861, approximating *nine thousand millions* of dollars — a sum nominally in excess of the entire increase of wealth, as returned by the census, for the whole country from 1850 to 1860.

II. The Greenbacks

A. *Quantity and Nature of the Greenback Issues, 1864*[1]

One of the methods adopted by Congress for raising war revenue was the issuing of United States notes, popularly known as greenbacks. The total amount authorized was $450,000,000. These notes displaced coins as a circulating medium and caused a rise in prices as measured in the greenbacks themselves. In other words the value of the notes fell measured in gold. Because of their effect on prices and on the circulation of gold, many persons have criticized Congress for authorizing them. An official account of the greenback situation was given in 1864 as follows:

The necessities of the treasury were, however, immediate. To raise money in large amounts by taxation, and even by loans, requires more time than can always be afforded with large armies in the field and great navies afloat. The demands of war are imperative, and cannot await the slow process of financial negotiations. To meet a demand thus urgent, Congress, by acts of February 25 and July 11, 1862, saw fit to authorize the emission of United States notes to the amount, including sixty millions of treasury notes previously author-

[1] *Treasury Report, 1864* (Washington, 1864), 3.

ized, which were to be redeemed and cancelled, of three hundred millions of dollars, as a substitute for coin, declaring them a legal tender for debts, public and private, and clothing them with all the requisites of currency. These notes were convertible, at the will of the holder, into bonds of the United States, paying interest at six per centum, semi-annually, in coin, to secure which the revenue from customs, also payable in coin, was specifically pledged. The same act of February 25, 1862, authorized the issue of bonds to the amount of five hundred millions, increased subsequently to five hundred and eleven millions, redeemable after five years and payable in twenty years from date.

Notwithstanding the ample provision supposed to be made by Congress for the expenditures of the fiscal year ending on the 30th of June, 1863, the report of the Secretary, submitted on the 4th of December, 1862, showed a deficiency for the current year of $276,912,517.66; while the estimated amount of expenditures over receipts from ordinary sources for the succeeding year was $622,388,186.56. To provide for the aggregate of these amounts, Congress, by an act approved March 3, 1863, authorized a loan of three hundred millions for the then current, and of six hundred millions for the then next, fiscal year. By the second section of the same act the Secretary was authorized to issue, as a part of said loan, four hundred millions in amount of treasury notes, bearing interest at a rate not exceeding six per centum per annum, payable in lawful money, which notes, payable at periods expressed on their face, might be made a legal tender at their face value. By the third section, one hundred and fifty millions in amount of United States notes, of a like character with those previously issued under the provisions of former acts, were authorized as a part of said loan.

It will be seen that, by the several acts of Congress referred to, government paper, as a substitute for coin, under the respective designations of United States notes and treasury notes, might be issued to the amount of eight hundred and fifty millions of dollars, viz.: United States notes, not bearing interest, to the amount of four hundred and fifty millions, but of which fifty millions were to be held in reserve for the redemption of temporary deposits, and to be replaced as soon as possible, thus leaving the whole amount intended for circulation but four hundred millions; and four hundred millions of treasury notes, bearing interest, and which it was hoped and believed would not remain in circulation, as they could be made a legal tender only for their face value, without interest.

B. *The Greenback Situation as Seen by an Englishman, 1865* [1]

Mr. Goldwin Smith, an eminent English historian, who spent many years as a teacher in an American university, made public in 1865 his views on the relation of the greenbacks to business. Mr. Smith freely criticized the financial policy of the government and pointed out its deadening effects on the country's business. He predicted nothing less than financial disaster unless the situation should improve. The most repulsive feature of the various laws under which the greenbacks had been issued had to do with the legal tender clause. His criticisms and views follow:

I went to America, convinced that, amidst so much that was truly great, the financial administration was the weak point; and I have returned with that conviction terribly confirmed. The root of the mischief, I venture to think, is the Legal Tender Act.

That measure not only subverted the faith of private contracts, but lowered the public credit, and is doubling the eventual burdens of the country. It was popular with the debtor interest, because it enabled the debtor to deprive his creditor of half the debt; and the debtor interest included a large number of the farmers, either as mortgagors or as purchasers of land for which the full price had not been paid. It has subjected persons living on fixed incomes, who for the most part are politically weak and submissive, to a confiscation of half their means of subsistence. It has deranged prices to such an extent, that when I was in Illinois the wages of a skilled mechanic equalled the salary fixed by the constitution for a judge; and it has thereby multiplied strikes, and introduced into industrial relations a malady which will not easily be expelled. It has filled trade with confusion and almost annihilated credit; and if it has thus indirectly put a stop to a certain amount of gambling speculation, it has created a speculation in gold more gambling than anything to which it has put a stop. But its worst effects, and those which will be longest felt, are the effects produced upon national credit and commercial morality by every act of questionable legislation.

From the Legal Tender Act it was but a natural step to the proposal made by a member of the Finance Committee, in unconscious imitation of the Reign of Terror, for forcing greenbacks up to par by penal legislation.

The advocates of the Legal Tender Act are loud in their praises of a national paper currency. But the Legal Tender Act and a national paper currency are, as a single glance at the financial facts of Europe might show, quite distinct things; having no necessary

[1] *Bankers' Magazine* (New York, 1864–5), XIX, 901–3.

connection with each other. And it is to be remembered that the smash of a local "wild-cat bank" is, at worst, a local evil; whereas, if the national exchequer becomes a "wild-cat bank," and smashes, the evil will be universal.

Within no long time it will be confessed that the Legal Tender Act was the most wasteful, as well as the most unfair in its incidence, of all imaginable systems of taxation.

If you touch upon the subject in America, the common answer is, "You cannot talk; you suspended specie payments and made bank notes a legal tender yourselves." Satisfied as they are apt to be with this retort, Americans do not inquire what were the economical and financial effects, immediate and ultimate, of a measure which, although anterior to the general diffusion of knowledge on economical subjects, was opposed by the most enlightened and upright economists of the time. Nor do they reflect that as our war was waged to a great extent abroad, and by means of subsidies to foreign powers, it was necessarily carried on partly in gold.

The melancholy part of the matter is, that the people demanded nothing of this kind. The people were ready for a sound and vigorous system of taxation, which would have sustained the public credit, and enabled the government to borrow what it needed in gold at a reasonable rate. In this and in other matters the people are leagues in advance of the politicians, who, bred under an evil system, are the last to feel the influence of a great national regeneration. The American nation is a gallant horse, if it had but a more gallant rider.

Americans have hitherto lived in blessed ignorance of taxation and finance. The consequence is a state of mind upon economical and financial subjects — not among the great merchants and chiefs of industry, who are, of course, most intelligent, but among the politicians and the mass of even educated men — which your correspondent terms "empirical," and which he justly says is passing from empiricism into science by a somewhat expensive process. No fallacy (in European estimation) is too exploded, no fancy too chimerical, to find acceptance and do mischief. The vague notion prevails that America, shooting ahead of the timid finance of the Old World, has triumphantly dispensed with a specie currency, though the greenback bears upon its face the flattering promise to pay specie, from which it manifestly derives its whole value. Strange theories, tending in the same direction, began to grow out of the fact that, from causes of which a very simple account may be given, real property did not at first rise in price like other articles of commerce. The

highest financial authorities, if I am rightly informed, were convinced that the fluctuations in the value of the paper currency were caused merely by a sort of conflict between the currents of national and local notes, the variations of which must have appeared to them to coincide curiously with those of military and political events. The President himself is generally supposed to be the author of the plan for issuing a description of stock not liable to seizure for debt, which would produce some moral as well as economical phenomena of an interesting kind.

The buried arguments of our protectionists have risen again in the New World; and the Americans, I fear, are in the minority, who do not believe that, by forcing capital and industry from the more remunerative to the less remunerative employment, a patriotic legislator may increase the national wealth. If misgivings arise, there is a ready appeal to the "boundless resources" of the country, as though untilled land and unwrought minerals, the possible elements of future opulence, could satisfy the immediate demands of the public creditor; as though they were anything more than natural powers, as valueless in themselves as water or air, and dependent for their ultimate value, in this case, on the influx of emigrant labor (which unsound economical measures, by raising the cost of living, will exclude) and the opening of internal lines of communication. In the last resort the American reminds the objector that America is a new country, though by what new laws of economy and finance it is governed, he would probably be at a loss to say. Adam Smith and the great European economists are little read; what is read in their place I forbear to describe.

These are disagreeable reflections. But the public liabilities, claims for compensation included, must be approaching three thousand millions of dollars; and the tax-paying spirit, which is now so high that during the three months I passed in the country I hardly ever heard a murmur, even from those who were most severely and unfairly taxed, will sink when the excitement of the war is at an end, while a conflict between different districts and interests, each trying to shift the burden to the other, will too probably ensue. At present the patriotism of the nation, its marvelous industry, the immensity of its real wealth, its intelligent fidelity to the government of its choice, and readiness to support all honest endeavors for the public good, would most likely enable a really strong man to return to a sounder system, and avert imminent disaster. But, unless a strong man soon appears, all that can be said, I fear, is that the Americans will bear a financial catastrophe better, and recover from it more speedily, than any other nation.

C. *Fluctuations in the Value of Greenbacks, 1864–1878* [1]

Soon after the greenbacks were issued their value, measured in gold, began to decline. From that time until the resumption of specie payments they continued to be worth less than gold. A general view of this depreciation as reported by the Comptroller of the Currency follows:

Since 1863 the measure of value has been subject to such frequent changes that business men, no matter how careful their calculations or prudent their arrangements, have been continually deceived by the false regulator which measures every transaction. If any single day is selected, for the purpose of comparison, from the business days of each of the last sixteen years, the measure of value will be found to have been as variable as the thermometer. This will be clearly seen in the following table, which gives the value, in standard gold coin, of the legal-tender paper dollar on July 1 of each year from 1864 to 1878, and also its value on November 18 of the present year:

1864	1865	1866	1867	1868	1869	1870	1871
Cts.	*Cts.*	*Cts.*	*Cts.*	*Cts.*	*Cts.*	*Cts.*	*Cts.*
38.7	70.4	66.0	71.7	70.1	73.5	85.6	89.0
1872	1873	1874	1875	1876	1877	1878	1878
Cts.	*Cts.*	*Cts.*	*Cts.*	*Cts.*	*Cts.*	*Cts.*	*Cts.*
87.5	86.4	91.0	87.2	89.2	94.5	99.4	99.8

In 1864 the value both of the Treasury note and the national-bank note was less than thirty-nine cents to the dollar. They are now alike worth ninety-nine and eighty-seven hundredths cents. It is within the province of the present Congress to discountenance henceforth in this country the use of a false and fluctuating measure of value, and to insure in its stead the use of a measure which is everywhere recognized as honest and true. . . .

D. *Resumption of Specie Payments, 1879* [2]

A law of 1875 provided for the resumption of specie payments, on January 1, 1879. To this end the Secretary of the Treasury collected a large supply of gold with which to redeem the greenbacks on demand. Mr. John Sherman, who was the Secretary of the Treasury when resumption took place, has described the event as follows:

At the date of my last annual report, December 2, 1878, the preparation for the resumption of specie payments, provided for by the

[1] *Report of the Comptroller of the Currency, 1878* (Washington, 1878), 25–6.
[2] *Treasury Report, 1879* (Washington, 1879), ix–xii.

act approved January 14, 1875, had been substantially completed. On the 1st day of January, 1879, the day fixed for the resumption of specie payments, the reserve of coin, over and above all matured liabilities, was $133,508,804.50.

Previous to that time, in view of resumption, United States notes and coin were freely received and paid in private business as equivalents. Actual resumption commenced at the time fixed by law, without any material demand for coin and without disturbance to public or private business. No distinction has been made since that time between coin and United States notes in the collection of duties or in the payment of the principal or interest of the public debt. The great body of coin indebtedness has been paid in United States notes at the request of the creditors. The total amount of United States notes presented for redemption from January 1 to November 1, 1879, was $11,256,678. But little coin has been demanded on the coin liabilities of the Government during the same period, though the amount accruing exceeded $600,000,000. Meantime coin was freely paid into the Treasury, and gold bullion was deposited in the assay office and paid for in United States notes. The aggregate gold and silver coin and bullion in the Treasury increased, during that period, from $167,558,734.19 to $225,133,558.72, and the net balance available for resumption increased from $133,508,804.50 to $152,737,155.48.

In accordance with the position taken in the last annual report, United States notes have been received, since January 1, last, in payment of duties on imports.

To meet the local demand for coin, in places other than New York City, persons applying have been paid silver coin for United States notes, the coin being delivered to them on established express-lines free of expense: and for some time gold and silver coin has been freely paid out at the several subtreasuries upon current obligations of the Government. There has been, however, but little demand for coin, and United States notes and the circulating-notes of national banks have been received and paid out at par with coin in all business transactions, public or private, in all parts of the country.

The specie standard, thus happily secured, has given an impetus to all kinds of business. Many industries, greatly depressed since the panic of 1873, have revived, while increased activity has been shown in all branches of production, trade, and commerce. Every preparation for resumption was accompanied with increased business and confidence, and its consummation has

been followed by a revival of productive industry unexampled in our previous history.

It is made the duty of this Department to maintain resumption, and for this purpose, in addition to the use of surplus revenue and the fund for resumption purposes, the Secretary is authorized to issue, sell, and dispose of, at not less than par in coin, either four, four and a half, or five per cent. bonds of the description set out in the refunding act, approved July 14, 1870. This act is based upon the idea that all necessary expenditures of the Government appropriated for by Congress, will be met by the current revenues, leaving the surplus revenues and the reserve-fund available for resumption. It is also provided by that act that the amount of United States notes to be redeemable on demand in coin shall be gradually reduced to the sum of $300,000,000. The act approved May 31, 1878, increases the maximum of United States notes, upon which resumption is to be maintained, to the sum of $346,681,016, the amount outstanding at the date of the passage of the act. It also provides as follows:

"And when any of said notes may be redeemed or be received into the Treasury under any law from any source whatever and shall belong to the United States, they shall not be retired cancelled or destroyed, but they shall be reissued and paid out again and kept in circulation.". . .

The great convenience and easy transportation of notes has thus far enabled the Treasury to exchange them for coin or bullion at all the centers of production of gold and silver in this country, and also to pay for large sums of foreign coin at the assay office in New York without any material draft on the resumption fund; and it is believed that this voluntary exchange will, in ordinary times, furnish the Treasury with all the coin necessary. It would be only in an emergency not easy to foresee, and not likely to arise, that the power to sell bonds for resumption purposes would be exercised, but it should be preserved to meet any extraordinary demand for the redemption of notes which might possibly occur.

The Secretary is, therefore, of opinion that the provisions of existing law are ample to enable the Department to maintain resumption even upon the present volume of United States notes. In view, however, of the large inflow of gold into the country and the high price of public securities, it would seem to be a favourable time to invest a portion of the sinking fund in United States notes, to be retired and canceled, and in this way gradually to reduce the maximum of such notes to the sum of $300,000,000, the amount fixed by the resumption act.

The Secretary respectfully calls the attention of Congress to the question whether United States notes ought still to be a legal-tender in the payment of debts. The power of Congress to make them such was asserted by Congress during the war, and was upheld by the Supreme Court. The power to reissue them in time of peace, after they are once redeemed, is still contested in that court. Prior to 1862, only gold and silver were a legal-tender. Bullion was deposited by private individuals in the mints and coined in convenient forms and designs, indicating weight and fineness. Paper money is a promise to pay such coin. No constitutional objection is raised against the issue of notes not bearing interest to be used as a part of the circulating medium.

The chief objection to the emission of paper money by the Government grows out of the legal-tender clause, for without this the United States note would be measured by its convenience in use, its safety, and its prompt redemption. In war, and during a grave public exigency, other considerations may properly prevail; but it would seem that during peace, and, especially, during times of prosperity and surplus revenue, the promissory note of the United States ought to stand like any other promissory note. It should be current money only by being promptly redeemed in coin on demand. The note of the United States is now received for all public dues, it is carefully limited in amount, it is promptly redeemed on demand, and ample reserves in coin are provided to give confidence in and security for such redemption. With these conditions maintained, the United States note will be readily received and paid on all demands. While they are maintained, the legal-tender clause gives no additional credit or sanction to the notes, but tends to impair confidence and to create fears of overissue. It would seem, therefore, that now and during the maintenance of resumption it is a useless and objectionable assertion of power, which Congress might now repeal on the ground of expediency alone. When it is considered that its constitutionality is seriously contested, and that from its nature it is subject to grave abuse, it would now appear to be wise to withdraw the exercise of such a power, leaving it in reserve to be again resorted to in such a period of war or grave emergency as existed in 1862.

The Government derives an advantage in circulating its notes without interest, and the people prefer such notes to coin, as money, for their convenience in use and their certain redemption in coin on demand. This mutual advantage may be secured without the exercise of questionable power; nor need any inconvenience arise from the

repeal of the legal-tender clause as to future contracts. Contracting parties may stipulate for either gold or silver coin or current money. In the absence of an expressed stipulation for coin the reasonable presumption would exist that the parties contemplated payment in current money, and such presumption might properly be declared by law and the contract enforced accordingly.

The Secretary, therefore, respectfully submits to Congress whether the legal-tender clause should not now be repealed as to all future contracts, and parties be left to stipulate the mode of payment. The United States notes should still be receivable for all dues to the Government, they should be properly redeemed on demand and ample provision made to secure such redemption.

III. The National Banking System

A. *Inadequacy of State Banking, 1863*[1]

Even during the years preceding the Civil War, state banking in many parts of the country had been inadequate, but with the coming of war and the suspension of specie payments that system practically broke down. Senator John Sherman of Ohio spoke of the situation in 1863 as follows:

. . . The question is between a national currency and a currency issued by State corporations, or a mixture of both. Now, I wish to state very briefly the objections to local banks; and I am here bound to say that I have always been friendly to banks, and am now interested in a bank.

The objections to local banks are obvious. Senators will recognize them and feel their force when I state them. The first is the great number and diversity of bank charters. There are sixteen hundred and forty-two banks in the United States, established by the laws of twenty-eight different States, and these laws are as diverse, I was about to say, as the human countenance. They are established upon various bases. We have the State bank system with its branches. We have the independent system, sometimes secured by bonds, sometimes State bonds, sometimes by real estate, sometimes a mixture of both. We have every diversity of bank system in this country that has been devised by the wit of man, and all these banks have a power to issue paper money, competing daily with the national currency. With this multiplicity of banks, depending upon different organizations, it is impossible to have a uniform national currency,

[1] *Congressional Globe, 1862–3* (Washington 1863), Appendix, 50.

for the value of our national currency is constantly affected by the issues of this multitude of State banks. There is no common regulator; they are dependent on different systems. The clearing-house system adopted in the city of New York, only applies to that city. It cannot be effective when extended over a great region of country. There is no check or control over these banks. There is a want of harmony and concert among them. Whenever a failure occurs, such as that of the Ohio Life Insurance and Trust Company, it operates like a panic in a disorganized army: all of them close their doors at once and suspend specie payments.

There is another objection to these local banks, and it is one which we cannot disregard, and that is their unequal distribution among the States. In New England the circulation of the banks is now about $50,000,000, while in Ohio, a State with three fourths of the population of all New England, it is but $9,000,000. When you make the contrast with other States, it is still more marked. We, in the West, are now using the paper money of the New England and New York banks, and we are paying to the East the interest on $40,000,000, which we would much rather, in these times of difficulty, pay to the United States. The western people would be better satisfied now if they had the notes or the United States instead of the $40,000,000 of eastern bank bills that are circulating among them. According to a recent statement, which I have before me, the circulation of banks in the eastern States has now reached about $130,000,000; and of that amount one third is computed to be in the western country. I have no doubt that we are now circulating in the West $40,000,000 of paper money issued by the banks of the East. Much of it seeks the West as a medium of exchange for our agricultural productions. We are using this money, and the banks are deriving a profit of the interest on that money. If this paper was driven out of circulation, and the United States notes should fill the vacuum, it would make a contribution to the Treasury of the United States of $2,400,000, for the mere interest of a currency which we do not prefer, but are now compelled to use because it is circulated among us.

The losses to the people by counterfeiting never can be avoided when you have such a multitude of banks. It requires now skilled experts to detect counterfeits. People have made this business of counterfeiting so perfect that it is difficult for the best experts to detect them; it now depends as well on the general appearance of the holder as of the note. When a stranger presents a bank bill for circulation, the person about to receive it looks rather at the man who presents

it to see whether his face is honest, than at the bill to detect whether it is counterfeit or not. It is impossible to avoid counterfeiting, or to provide guards against it. Bank experts may save the banks, but the loss still falls upon the people. You cannot prevent the people from suffering largely from counterfeiting when you have sixteen hundred different banks, issuing each of them several different kinds of bills, under the laws of twenty-eight different States. On the other hand, by the substitution of the national currency we substantially lose nothing by counterfeiting. When the notes are few in kind, only three or four of them, all issued by the United States, all of uniform character, they cannot be counterfeited, because their face will become so familiar that every man will know a genuine note; he will detect it in a moment as the countenance of a familiar friend. But when he has to decide on the issues of sixteen hundred banks, how is it possible for an ordinary citizen to detect the counterfeit?

The loss to the people of the United States by broken bank bills is computed to be equivalent to five per cent. of the entire issue. Every twenty years it is supposed that the entire bank circulation ceases to exist or deteriorates. Some banks pass through the storm and their notes are good, but probably two or three are successively scattered as wrecks along the wayside, until it is now computed by intelligent bankers that the loss to the people of the United States, over and above the loss of interest, by the simple process of broken bank bills, is five per cent. per annum. This cannot be guarded against by all your laws. Why, sir, when the system of free banking was established in the western country, all those who were friendly to banks, and I was among them, said, "now we have a stable issue; we have bank bills based upon the bonds of the States, and it is not possible that these bonds will ever deteriorate in value and the people lose money." And yet, sir, within two years from the establishment of this system, by the depreciation of the bonds of the States, or by fraud, these notes became depreciated, and in some cases were of no value whatever. In some cases the bonds were abstracted; in some cases frauds were committeed by bank officers. From some cause or other these notes that we all supposed to be upon a stable basis disappeared like snow before the summer's sun. The people are constantly losing by them, and you cannot by the wisdom of man guard against the frauds and peculations, the genius of rascality to which men sometimes engaged in this business resort. I wish to cast no reflection whatever on persons engaged in banking, but naturally rogues will resort to this business because it is one in which they may

sometimes by deception issue worthless promises to pay without punishment or exposure.

The loss of exchange by local currency is very great. Ordinarily, the exchange from the West to the East is one per cent. This loss is usually made a gain to themselves by the bankers and shavers. The suction of this class of people is equivalent to one per cent. of the circulation. In the western country you cannot buy a draft without paying this exchange; and I have known it as high as ten per cent. This difference of exchange is a common cover for usurious interest. Plain farmers wishing to borrow money are required to draw drafts on New York, by which contrivance they pay usurious interest. All this exchange is a loss to the people. Even in the most favorable time, in a favorable state of trade between the East and the West, an exchange of one per cent. is demanded for drafts and bills of exchange, simply because the notes of the East are worth more than those of the West. But if you had a national currency, uniform and equal throughout the country, the cost of exchange to the people would only be the cost of transfer from one portion of the country to the other. From Cincinnati to New York it would be only one tenth of one per cent., and it could not be higher if the only basis of exchange was gold and silver, or the paper money of the United States, which can be transferred from one section to the other for from one tenth to one eighth of one per cent.

There is a still more serious objection to this paper money. With a system of local banks there is no power to control over-issues and consequent depreciation of currency. By enlarging the volume of currency, it depreciates the value of United States notes; and even now, when the United States have issued $250,000,000 of notes, the banks have increased their circulation. Why? Because they can make money by its increase, and that consideration will always control private individuals. We cannot say that it would not control us; if we had the legal authority to issue money, and found that we could make money by the issue, we should find reason enough for issuing it. Men will always be governed by their interests.

I have before me a table which has been carefully prepared, showing that on the 1st of January, 1862, in the loyal States, there was a circulation of $129,000,000. Now it is $167,000,000. What power have you over this? How can you prevent this increase? You cannot do it except by taxation. The banks are governed by the local laws of the States in which they are situated. Those local laws are beyond your power; you have no way to reach them except by

a system of taxation. They may go on making this increase from $167,000,000 to $500,000,000, until all the values in this country are destroyed, depending upon a baseless issue, the redemption of which you cannot guaranty. I have here, from the Bankers' Magazine, a statement showing where this large increase has occurred. In the city of New York there has been an increase, since the 1st of January, of $19\frac{63}{100}$ per cent.; in the State of Massachusetts there has been an increase of $41\frac{94}{100}$ per cent.; in the State of New Hampshire there has been an increase of $27\frac{5}{100}$ per cent.; in the city of Philadelphia there has been an increase of $138\frac{30}{100}$ per cent.; until the sagacity of the bankers began to notice the increase and suspected the money of the banks issuing the large increase. In the western country, for local reasons that I need not mention, on account of the existence of the limitations in the charters of the banks of Ohio and Indiana, this increase has not gone on so rapidly; but even in Ohio there has been an increase, and a considerable increase, of the paper money.

B. *Superiority of the National Banking System, 1868* [1]

The first year of the war made it evident that the prevailing state banking system was inadequate. Consequently an agitation arose to place banking under the control of the federal government, with the result that Congress in 1863 provided for the national banking system. To bring the banking operations of the country still further within the control of the federal government, an act of 1865 imposed a ten per cent tax on state bank notes. Both acts were justified on the ground that business demanded a more uniform and stable currency than was in circulation at the time. At first the number of national banks increased more slowly than the friends of the system had anticipated. It soon became evident, however, to those who were in the best position to judge that the system possessed real merit. The Banker's Magazine expressed such an opinion in 1868, as follows:

The revolution which has taken place in the United States, within the last five years, in the systems of Banking and Currency, is without a parallel in history, in respect both to its extent and its completeness. On the first day of January, 1862, there were, in the several States (including those in rebellion, according to their latest returns to the Secretary of the Treasury), 1,496 banks, with a capital of $420,000,000. They existed under the laws of twenty-nine States, and they had different privileges, and were subject to different obligations. All of them were banks of issue, and they had in circulation notes to the amount of $184,000,000. These notes had only a local currency,

[1] *Bankers' Magazine* (New York, 1867–8), XXII, 681–2, 690, 695.

more or less restricted, and were not of equal value. Many of them continued to be at par with gold until the suspension of specie payments in December, 1861, and had for a long time enjoyed the confidence of the public, although the safeguards by which their credit was maintained differed essentially in different States. Thus, in New England, the safety of the bill-holder was secured by the daily redemption of all New England bank-notes in Boston; in New York, by the pledge of stocks of adequate value with the Banking Department; in New Orleans, Kentucky, and Indiana (so far as the issues of the State Bank were concerned), by the magnitude of their coin reserves. But in many of the Western States the banks were insolvent, and their currency greatly depreciated. Thus, in Illinois, eighty-nine banks had failed, and their bills were redeemed by the State auditor, at rates varying from fifty per cent. to par. In Wisconsin, the notes of thirty-nine banks were discredited; and in Minnesota nearly all of them were in liquidation.

The "Act to provide a National Currency, secured by a pledge of United States bonds, and to provide for the circulation and redemption thereof," was passed on the 25th of February, 1863. It was re-enacted in a new draft, not essentially differing from the original law, on the 3d of June, 1864. Under the provisions of these statutes, the banks of the several States have ceased to exist as banks of issue, and nearly all of them have become National associations.

On the first day of October, 1867, there were 1,637 National banks in operation, having a capital of $420,000,000 (the exact capital of the State banks in 1862), and circulating notes to the amount of $294,000,000; while only four millions of the State bank issues were still outstanding. The notes of the National banks are secured by a deposit of $338,000,000 in Federal bonds, by a first and paramount lien on all the assets of the banks, by a personal liability of the shareholders to an amount greater than the circulation, and by the absolute guaranty of the Government; while their convertibility is further protected by the obligation of the government to redeem them instantly at the Federal Treasury, if the bank by which they are issued shall fail to redeem them on presentation at its counter. Thus fortified, the National bank notes are of equal value throughout the Union, whatever may be the place of issue.

The question is now before the country, whether this system of banking shall be maintained or overthrown. The decision of it rests with Congress, and there is no one of the financial problems, which are waiting for the solution of that body, more important to the public

welfare. If, after a fair trial, the National banking system has proved a failure, let it be condemned; but it will be unbecoming the dignity of the National Legislature to pronounce such a condemnation without the fullest consideration of what it involves. . . .

1. In enumerating the advantages, which we claim for the National Banking system, we place first, therefore, *the uniformity which it has introduced into both the currency and the banking of the country.* It is an important point gained, when any of the great departments, into which the business of a country is divided, can be carried on, in all parts of a wide territory, on the same principles, and under the same regulations. The tendency of the time is toward the organization, and even the consolidation, of great business enterprises. Witness the important operations which have been recently effected in the consolidation of railway, telegraph, and express property, and the arrangement of far-reaching lines for merchandise transportation. But it is more important, that this principle of co-operation, and uniform organization, should prevail in banking, than in any other business, because its special office is to regulate the machinery of the exchanges, of credit, and of the circulation. The banks have been constantly striving to attain this end without legislation. The Clearing House system is the crowning triumph of this principle of voluntary organization. . . .

2. The second important advantage which we claim for the National Bank system, is *the safety of the currency.* We have seen that the plan of securing the circulation by a pledge of public stocks, was not original with MR. CHASE. It had been tried, with varied results, in several of the States. In New York it had operated well, because the bonds of that State were secured; but it had failed in Indiana, Wisconsin, and Illinois, because the securities received as a basis for the circulation were not sound. It is obvious, therefore, that the principle of securing the bank-note by a pledge of State stocks, was not of itself a sufficient safeguard, while there is so great a difference in the value of State obligations; nor would it have been possible for the Federal Government, in fixing a basis for the circulation which it desired to issue, to admit the bonds of any State, without receiving those of all, since any discrimination in favor of the richer States, would naturally have given offense to the poorer. The Federal bonds, being the common debt of the nation, were the only securities, adequate in amount to furnish a basis for the circulation, or which were of equal value and obligation in all the States. In adopting them as a basis of banking, we followed not only the earliest

practice of our own Government, but also that of the most enlightened countries of Europe. . . .

C. *Development of Banking, 1879–1909* [1]

Since the Civil War banking has had a remarkable growth in the United States. State and private banks and trust companies as well as national banks have enjoyed an increasing prosperity. A view of this development during the thirty years prior to 1909 follows:

In [1886, state banks] . . . were far outnumbered both by private and by national banks, but by 1899 they were the most numerous class of banking institutions in the United States. Since 1899 their rate of increase has been even greater. The following table shows the number of national banks, state banks, private banks, and trust companies at certain dates:

	1879	1884	1889	1894	1899	1904	1909
National banks	2,048	2,625	3,239	3,770	3,583	5,331	6,893
State banks	813	1,017	2,097	3,705	4,253	6,984	11,292
Private banks	2,545	3,458	4,215	3,844	4,168	5,484	4,407
Trust companies	37	44	63	228	276	924	1,079

Of the whole number of banks and trust companies in the United States on January 1, 1910, nearly one-half were state banks; and, if we deduct from the number of private banks the large number of brokers so classified who do not do a banking business, the state banks are considerably more than one-half of the total. In 1879 less than one-sixth of the total number of banks and trust companies were state banks.

The increase in the number of state banks has by no means been uniform in the different sections of the country. The number of state banks in the different groups of States for the years 1879, 1889, 1899, and 1909 is shown in the following table [on page 708]:

It will be noted that the greatest increase in the number of state banks has been in the Southern, Middle Western, Western, and Pacific States. In the New England States the number of state banks is exactly the same as in 1879, and in the Eastern States the increase in the number of state banks has been small. . . .

[1] *State Banks and Trust Companies Since the Passage of the National-Bank Act.* By George E. Barnett. National Monetary Commission (Washington, 1911), 201–4.

Number and percentage of increase of state banks, by groups of States, for the years 1879, 1889, 1899, and 1909

Group	1879	1889		1899		1909	
	Number	Number	Percentage of increase	Number	Percentage of increase	Number	Percentage of increase
New England ..	19	22	16	23	5	19	−17
Eastern.....	189	253	34	334	32	387	16
Southern.....	204	464	127	1,071	131	3,312	209
Middle Western	295	675	129	1,594	136	3,717	133
Western.....	42	528	1,157	956	81	3,026	216
Pacific.....	64	155	142	275	77	831	202
Total.....	813	2,097	158	4,253	102	11,292	165

In the New England and Eastern States, the state banks fall far behind both the national banks and the trust companies in number as well as in aggregate capital. Only a little more than 2 per cent of the capital invested in the New England States in the three classes of banking institutions is represented by the capital of the state banks. The state banks are somewhat more important in the Eastern States, but less than 10 per cent of the banking capital in this group of States is represented by the capital of the state banks. In all the other groups of States the state banks are more numerous than either the national banks or trust companies. In none of these groups, however, is the capital invested so great as that invested in national banks, although in all of them it is greater than the amount invested in trust companies. In the Western and Pacific groups, however, the amount of the capital of the state banks approximates that of the national banks. In the Southern States the capital of the state banks is in amount nearly four-fifths of that of the national banks, and in the Middle Western States a little more than one-half. . . .

The rapid increase in the number of trust companies began much later than the increase in the number of state banks. The number in the entire United States did not exceed 100 until 1888, and the number of accessions was not large until 1899. Since that time the increase has been very rapid. According to the reports made to the National Monetary Commission, on April 28, 1909, nearly 1,100 trust companies were actively engaged in business.

The great development of the trust company has been almost entirely in the New England, Eastern, and, to a less extent, in the Middle Western States. Nearly one-half of all the trust companies in the United States are in the New England States, Pennsylvania, and New York. . . . The capital of the New England trust companies is approximately one-third of that of the New England national banks, and the capital of the trust companies of the Eastern States is nearly two-thirds of that of the national banks in those States. In both of these groups the trust companies are far more numerous and of a much greater aggregate capital than the state banks. In the Southern, Middle Western, Western, and Pacific groups the trust companies are far less numerous and far less important, measured by the amount of their capital, than either the national or the state banks.

D. *Expected Benefits of the Federal Reserve Act, 1914*[1]

The new banking law of 1914 was the result of a long-drawn-out agitation for reform in government regulation of national banks. The benefits expected to be derived from the new law were stated by Mr. Williams, Comptroller of the Currency, as follows:

The Federal reserve act, approved by President Wilson on December 23, 1913, is designed not only to cure weaknesses and defects of the currency system under which we have struggled, and sometimes staggered, in the past, as we have outgrown the conditions and passed beyond the circumstances which it was especially provided to meet, but to offer to the people of this country many new advantages and opportunities, while emancipating business from many evils, difficulties, and troubles with which it has been burdened and from which it has found no escape.

Among the principal direct benefits which the new act confers are these:

First, it supplies a circulating medium absolutely safe, which will command its face value in all parts of the country, and which is sufficiently elastic to meet readily the periodical demands for additional currency, incident to the movement of the crops, also responding promptly to increased industrial or commercial activity, while retiring from use automatically when the legitimate demands for it have ceased. Under the operation of this law such financial and commercial crises, or "panics," as this country experienced in 1873, in 1893, and again in 1907, with their attendant misfortunes and prostrations, seem to be mathematically impossible.

[1] *Report of the Comptroller of the Currency, 1914* (Washington, 1914), I, 10–12.

Second, it provides effectually and scientifically for the mobilization of bank reserves in the 12 Federal reserve districts, where these funds are not only available for the member banks of each respective district, but, under wise and well-guarded provisions of the law, the surplus moneys of any one district become available for the legitimate needs of any other districts which may require them.

Third, it eliminates the indirect tax of many millions of dollars annually upon the commerce and industry of the country, heretofore imposed in the shape of collection or "exchange" charges on checks, and inaugurates a system of clearances by which it is expected that every check or draft on any member bank in any one of the 12 Federal reserve districts can be collected ultimately free of the exchange charges heretofore exacted and may be charged on the books of the Federal reserve bank to the account of the bank upon which drawn, in most cases, within 24 hours or less after it is deposited with a member bank. This provision renders available many hundreds of millions of dollars heretofore carried in transit in the mails in expensive and tedious processes of collection, sometimes absolutely useless during weeks when much needed, held in transit moving from point to point.

Fourth, it furnishes a discount system by which every well-managed member bank may have the opportunity of converting into money by rediscounting, to such extent as may be necessary or desirable, all commercial paper having not more than three months to run which it may have taken in the ordinary course of its business. The new law removes, so far as borrowing money from a Federal reserve bank is concerned, the limitation which prevented a national bank from borrowing an amount in excess of 100 per cent of its capital. The significance of this release may be appreciated when it is realized that some national banks have deposits amounting to 10 times their capital or more. The ability to borrow only an amount equal to capital would be wholly insufficient, in many cases, to enable banks to meet the demands which arise from unexpected runs, or in financial crises, or other extraordinary demands.

It removes from prosperous and well-managed banks penalties hitherto imposed on their very prosperity and success.

It relieves the well-managed bank from the limitations of original capital invested and gives it the legitimate advantages of its own enterprise and the business it has built up and actually does.

Fifth, by making it possible for any well-managed bank to convert its assets readily into cash to meet unexpected contingencies or runs, the necessity for the larger reserves heretofore required ceases. It

is estimated that by this reduction in the reserve requirements alone more than four hundred millions of dollars of money or credits heretofore held in reserves and inert, will become available for commercial purposes and the legitimate demands of business.

Sixth, the new law also makes it possible for national banks to lend money on improved, unencumbered farm property, thus enabling farmers, the most numerous and in many respects most important portion of our population to participate directly in the beneficent provisions of the new law.

Seventh, the new law provides that national banks may establish branches in foreign countries, these branches to be under the jurisdiction and subject to the rules, regulations, and examinations of the comptroller's office. These branch banks should be material aids in building up our foreign commerce.

Eighth, the former system of paying national bank examiners by fee is abolished; and the examinations of all member banks, both National and State, are now placed upon a basis which necessarily will insure a thoroughness and efficiency hitherto impossible.

Under the provisions of the new law the failure of efficiently and honestly managed banks is practically impossible and a closer watch can be kept on member banks. Opportunities for a more thorough and complete examination are furnished for each particular bank. These facts should reduce the dangers from dishonest and incompetent management to a minimum. It is hoped that national-bank failures can hereafter be virtually eliminated.

Ninth, the establishment of a system of bank acceptances and an open market for commercial paper, which, it is believed, will aid and facilitate this country in obtaining a larger share of international trade and of the world's commerce.

IV. The Silver Question

A. *The "Crime of '73"* [1]

In 1873 Congress enacted a new coinage law in which no provision was made for coining the standard silver dollar. During the free silver discussion that followed the friends of silver declared that the act had been passed without free and full discussion of its provisions. They referred to it as the "Crime of '73." Senator John P. Jones, of Nevada, stated the position of the free silver men as follows:

Mr. JONES said:

Mr. President: The act of February 12, 1873, . . . which

[1] *Congressional Record, 1875–6* (Washington, 1876), Appendix 67, 78, 88, 97.

under the guise of regulating the mints of the United States, practically abolished one of the precious metals, was a grave wrong; a wrong committed no doubt unwittingly, yet no less certainly, in the interest of a few plutocrats in England and in Germany and as certainly in the interest of the entire pagan and barbarian world; a wrong upon the people of the United States and of the whole civilized globe; a wrong upon industry, upon the natural tendency of wealth toward equalization, upon the liberties of peoples which are born out of the effects of such equalization of wealth, upon every aspiration of man which depends for its realization upon the development of those liberties.

The act alluded to practically abolished one of the precious metals as money, the one chiefly produced in this country, the one chiefly consumed in the semi-civilized countries of Asia, and the one which at the date of its abolition and under the time-honored laws that previously prevailed was becoming, as it has since become, the more available metal of the two in which to transact exchanges and liquidate debt. . . .

But the manner in which this legislation was affected leaves but little reason to infer that any deliberate judgment was exercised on this important subject of the standard, or that the question was ever so presented to the American people as to elicit the indorsement or the approval of any single congressional constituency. The bill by which it was effected originated, as I understand it, in another bill which was introduced into the House of Representatives February 9, 1872. It was discussed for a few moments on April 9, 1872. Then the discussion was cut short, and a substitute, the present law, reported by title on May 27, and passed without a reading, under a suspension of the rules, May 29, 1872. From the House it went to the Senate, where, without any discussion at all upon the all-important section 14, it passed; and, after concurrence by the House, again without a discussion, became a law.

I am aware that it has been stated that the bill was passed after very full discussion on this subject; but I am unable to find a corroboration of this statement in the official report of the proceedings. If any such full discussion appears in the Congressional Globe, I shall be glad to have it pointed out in order that I may correct the impression now on my mind in respect of this matter. . . .

At the bottom of this dangerous effort to abolish the double standard of this country lie nothing but selfishness and injustice — the selfishness of a class who desire to receive payment for debts and obliga-

tions in a metal which, for the moment, and at the mean natural relation, is a few per cent. dearer than the other. . . .

Opposed to the consummation of this injustice, not only does all nature array herself, but so also do the unconscious instincts of humanity, the occult working of social institutions. Consummate it if you can, and you will have poverty, distress, commotion, and perhaps revolution. Having consummated it, try then to undo it, and you will find the task beset with great difficulties.

Neglected dislocations of the human frame are difficult to remedy; because the wrenched member finds for itself a new socket. The dislocation of the social fabric which threatens to result from the effects of the act of 1873 may yet be averted by the timely measure of restoring the double standard before we attempt to resume specie payments.

You cannot expect to take a nation by the throat, hold it down, squeeze the last drop of substance out of it, no matter in what sacred name, whether of honor or justice, without running the risk of being taken by the throat yourselves. No matter how cunning the injustice is, it is sure to be found out when it comes to work, and sure to be avenged when it is found out. All the interests of society, even the safety and permanence of vested interests, demand the exercise of equity in the affairs of government; and I tell those who represent such interests that, in the long run, they will best consult their advantage in being just at the outset. They got the people of this country by the throat in the ambiguously worded act of February 25, 1862. They pinned the people down by the coin-paying act of March 18, 1869, and now they would squeeze the last drop of substance out of them by the single gold standard act of February, 1873, which they propose to carry into effect by the resumption act (a very proper act of itself) of 1875. And now my advice to them is, to stop and undo the worst part of their work, by repealing so much of the act of 1873 as prevents the silver dollar from being tendered for the payment of debts. The people have paid their full ransom to Brennus; let him not attempt to overload the scale with the weight of his sword, or they may take it up and use it. . . .

I have done. For the patience and attention with which Senators have listened to an exposition unusually lengthy and somewhat tedious, I thank them, and can only plead the transcendent importance of the subject.

There is yet time to undo the work of 1873, to correct the grave blunder perpetrated by the mint act of that year, in interdicting the American silver dollar and substituting the single standard of gold for

the money of the Constitution. The disastrous effects which, in my opinion, are bound to flow from this attenuation of the standard and the basis of prices and credit are not yet felt because of the existing suspension of specie payments; but so soon as specie payments are resumed — if indeed they can ever be resumed without the restoration and co-ordination of silver in the standard — will the bad effects of this legislation develop themselves and make their mark upon the affairs of the country. It may then be too late to reform.

The present is therefore the acceptable time to undo the unwitting and inconsiderate work of 1873, and to render our legislation upon the subject of money consistent with the physical facts concerning the stock and supply of the precious metals throughout the world and conformable to the Constitution of the country.

We cannot, we dare not, avoid speedy action upon this subject. Not only do reason, justice, and authority unite in urging us to retrace our steps, but the organic law commands us to do so, and the presence of peril enjoins what the law commands. . . .

B. *The Coinage Act of 1873 Defended* [1]

Senator Jones' charge that the coinage law of 1873 had been passed as the result of underhand legislation did not go unanswered. Senator John Sherman of Ohio defended the act as follows:

. . . Perhaps there is no law on the statute-book that received more thorough consideration than the act of 1873, which is entitled "An act revising and amending the laws relative to the mints, assay offices, and coinage of the United States." It is a long law, covering, I think, twelve pages of the Statutes of the United States, and was approved February 12, 1873. That act was first introduced from the Treasury Department in January, I think, 1870, more than three years before it passed. It was discussed at some length in the Senate; was then printed and sent all over the country to every person who was familiar with the subject, especially to California, to Nevada, the Mint at Philadelphia, and largely to Europe; and it was thoroughly examined. It came back, and in the following session, that is, the session of 1870 and 1871, it passed the Senate of the United States. Subsequently the bill failed in the House for want of time in that Congress. At the next session, however, it was introduced in the House of Representatives. It was there discussed, and finally passed the House of Representatives and came to the Senate, the same bill in

[1] *Congressional Record, 1875–6* (Washington, 1876), 2734–5.

effect that had previously passed the Senate of the United States. In the Senate it was again examined, rediscussed, considered, and passed. So that this bill really was pending in Congress nearly four years, and it was discussed in every stage of its progress. It was examined by experts not only in this country but in Europe. It was prepared at the Treasury Department, and largely prepared by Mr. Patterson, of Philadelphia, who is now, probably, the most eminent authority in this country on the subject, and by Dr. Linderman, and others. It was submitted to all classes, and especially to persons living in California and other parts of the country interested in the production of gold and silver.

There is another thing to which I wish to call attention. The act of 1873 did not make any essential change in the then existing law. The only change of importance in the previous law made by the act of 1873 was made at the request of the interests in California. That is, the trade-dollar was introduced as a mercantile dollar to enable them to send in a convenient form the production of silver in this country to China. This was the only change made in the then existing law of any material character. The bill itself was but a codification and revision of the laws relating to the mints of the United States and the coinage of the United States, changing but slightly any material features of the existing laws. The proposition about the trade-dollar was introduced at the request of merchants and dealers in bullion in San Francisco, and was intended simply as a means of enabling them to put in the best and most valuable form the silver bullion of the country with a view to its exportation to China and Japan.

My honorable friend from Nevada in his long and carefully prepared speech has gone upon the idea that the act of 1873 in some way demonetized silver. What I have stated shows that it did not in the slightest degree demonetize silver. My friend from Missouri (Mr. Bogy) was perfectly correct in saying that so far as the silver coins were concerned the act of 1873 did not have the slightest effect upon them. But, on the other hand, the act of 1853, to which the Senator from Nevada did not seem to allude except in quoting the report of Mr. Hunter, did adopt the system of what is called a subsidiary coinage of silver; that is, it made the coinage of silver subsidiary to gold. It provided for a gold coinage, and made the silver coinage of fifty-cent pieces, twenty-five-cent pieces, ten-cent pieces, &c., called subsidiary coins, and demonetized those by reducing them to about 6 per cent. below the legal relative value of sixteen to one; and

if there is any law to complain of on the statute-books of the United States, it is the law of 1853, in that respect. . . .

. . . The act of 1873 did not affect it in the slightest degree, and therefore the comments made by the Senator from Nevada rest on an error in that particular. The essential qualities of the act of 1873 are precisely like the act of 1853. It provided for subsidiary coins. The substance of the act of 1853 was to provide for a subsidiary coinage of silver. But there is another thing to be remembered. The right to coin the silver dollar, which is now proposed to be authorized again, has always existed in this country, has never been taken away. It is the legal dollar to-day, and the silver dollars that are now outstanding, if there are any, and I suppose there are not many, are a legal tender for all amounts unless the quality of legal tender has been taken away by these Revised Statutes.

The act of 1873 is before me. As I said, it is one of the most carefully prepared statutes that ever were passed in any country in the world. It underwent the scrutiny of persons here and abroad; and for four sessions of Congress was it here and discussed. That act simply leaves the old dollar where the law of 1853 left it. It says nothing about it. It says that no coins but these named shall be issued under the act; but the old silver dollar stood precisely as it stood before under the act of 1853. It was true it had not been issued since 1853; and I suppose not for some years before that, though I do not know. . . .

I have been often asked not only in this Chamber but outside, how comes it that the silver dollar was dropped from among the coins of the country. The answer is that in 1873, when these statutes were so carefully revised, the silver dollar as provided in the then existing law was worth more than a dollar in gold, more in the money markets of the world. There was no use then in issuing the dollar, because it would go into the melting-pot, being worth more than the gold dollar. That was the reason why the silver dollar was not provided for. That was before the movements which have been commented upon in Europe, and especially in Germany, commenced to affect the price of silver. The United States had since the act of 1837 undervalued silver; that is, they required sixteen ounces of silver to be equal to one ounce of gold. The result was that a dollar in silver was worth more than a dollar in gold. France and other countries had said that fifteen and a half ounces of silver should be equal to an ounce of gold, and that made a difference of 3 or 4 per cent. as between their relation and ours, which difference was sufficient to induce the exportation of

silver in the form of dollars or bullion to France or the countries of Europe where the double standard prevailed. The result was that there was no object in 1873 in providing for the silver dollar. If it had been issued from the Mint it would not have gone into circulation, but would have been exported. The idea of reducing it down to the French standard of fifteen and a half to one was not entertained, as our subsidiary coin which then filled the channels of circulation was actually only fourteen and a half to one. There was no object, therefore, in issuing the silver dollar for the purpose of maintaining the double standard.

These were the circumstances, and I simply rose now at the heel of the argument of the honorable Senator from Nevada to correct the misapprehension into which he has fallen about the act of 1873. The act of 1873 itself was but a codification of the then existing laws of the United States, and, with the exception of prohibiting the issue of the silver dollar, it did not change in the slightest degree the law of 1853, so far as it affected the silver coin. The silver coins now in circulation were practically provided for by the act of 1853. The only change made by the act of 1873 was in measuring the weight of these coins in grams instead of in grains, slightly changing to the extent of about $\frac{1}{2}$ of 1 per cent. the value of the silver in the silver coins; and this was done to make them assimilate, dollar for dollar, grain for grain, weight for weight, size for size, with the French silver coins now in circulation, so that a five-franc piece is $1, and the same proportion prevails throughout.

C. *Operation of the Bland-Allison Silver Purchase Act, 1878–1889*[1]

By 1878 the agitation for the remonetization of the standard silver dollar had become strong enough to compel favorable legislation. Accordingly the first silver purchase act, generally known as the Bland-Allison Act, was passed by Congress. This act provided for the purchase of silver by the Treasury Department; and its operation during almost its entire existence was described in 1889 by the Secretary of the Treasury as follows:

The continued coinage of the silver dollar, at a constantly increasing monthly quota, is a disturbing element in the otherwise excellent financial condition of the country, and a positive hindrance to any international agreement looking to the free coinage of both metals at a fixed ratio.

Mandatory purchases by the Government of stated quantities of silver, and mandatory coinage of the same into full legal-tender dollars,

[1] *Treasury Report, 1889* (Washington, 1889), LX–LXI.

are an unprecedented anomaly, and have proved futile, not only in restoring the value of silver, but even in staying the downward price of that metal.

Since the passage of the act of February 28, 1878, to November 1, 1889, there have been purchased 299,889,416.11 standard ounces of silver, at a cost of $286,930,633.64, from which there have been coined 343,638,001 standard silver dollars.

There were in circulation on November 1 of the present year 60,098,480 silver dollars, less than $1 per capita, the remainder, 283,539,521, being stored away in Government vaults, of which $277,319,944 were covered by outstanding certificates.

The price of silver, on March 1, 1878, was $54\frac{1}{16}$ pence, equal to $1.20429 per ounce fine. At this price $2,000,000 would purchase 1,660,729 ounces of fine silver, which would coin 2,147,205 standard silver dollars. At the average price of silver for the fiscal year ended June 30, 1889 (42.499 pence), equivalent to $0.93163 per ounce fine, $2,000,000 would purchase 2,146,755 fine ounces, out of which 2,775,628 standard silver dollars could be coined.

The lower the price of silver, the greater the quantity that must be purchased, and the larger the number of silver dollars to be coined, to comply with the act of February 28, 1878.

No proper effort has been spared by the Treasury Department to put in circulation the dollars coined under this law. They have been shipped, upon demand, from the mints and sub-treasuries, free of charge, to the nearest and the most distant localities in the United States, only to find their way back into Treasury vaults in payment of Government dues and taxes. Surely the stock of these dollars which can perform any useful function as a circulating medium must soon be reached, if it has not been already, and the further coinage and storage of them will then become a waste of public money and a burden upon the Treasury.

It is freely admitted that the predictions of many of our wisest financiers, as to when the safe limit of silver coinage would be reached, have not been fulfilled, but it is believed that the principles on which their apprehensions were based are justified by the laws of trade and finance, and by the universal experience of mankind. While many favorable causes have co-operated to postpone the evil effects which are sure to follow the excessive issue of an overvalued coin, the danger none the less exists.

The silver dollar has been maintained at par with gold, the monetary unit, mainly by the provisions of law which make it a full legal

tender, and its representative, the silver certificate, receivable for customs and other dues; but the vacuum created by the retirement of national-bank circulation, and the policy of the Government in not forcibly paying out silver, but leaving its acceptance largely to the creditor, have materially aided its free circulation.

The extraordinary growth of this country in population and wealth, the unprecedented development in all kinds of business, and the unswerving confidence of the people in the good faith and financial condition of our Government, have been powerful influences in enabling us to maintain a depreciated and constantly depreciating dollar at par with our gold coins, far beyond the limit which was believed possible a few years ago.

But the fact must not be overlooked that it is only in domestic trade that this parity has been retained; in foreign trade the silver dollar possesses only a bullion value.

D. *Effect of the Sherman Silver Purchase Act on the Supply of Money, 1893.*[1]

In 1890 the Bland-Allison Silver Purchase law was repealed and the so-called Sherman Silver Purchase law was enacted. Three years later this latter law was repealed. During its existence the money supply of the country was materially increased. A view of the increase at this time of its repeal was given as follows:

. . . This vast increase in the volume of outstanding currency, notwithstanding the enormous exports of gold during the year, is the result of several causes, among which may be mentioned the issue of Treasury notes for the purchase of silver bullion, the excess of public expenditures over receipts, the additional circulation called for by the national banks during the late financial stringency, and the large imports of gold, which amounted during the months of July, August, September, and October, 1893, to the sum of $55,785,526. That the amount of money in the country is greater than is required for the transaction of the business of the people at this time is conclusively shown by the fact that it has accumulated, and is still accumulating, in the financial centers to such an extent as to constitute a serious embarrassment to the banks in which it is deposited, many of which are holding large sums at a loss. This excessive accumulation of currency at particular points is caused by the fact that there is no such demand for it elsewhere as will enable the banks and other institutions to which it belongs to loan it to the people at remunerative

[1] *Treasury Report, 1893* (Washington, 1893), LXXIV–LXXVII.

rates, and it will continue until the business of the country has more fully recovered from the depressing effects of the recent financial disturbances. . . .

The unsatisfactory condition of our currency legislation has been for many years the cause of much discussion and disquietude among the people, and although one great disturbing element has been removed, there still remain such inconsistencies in the laws and such differences between the forms and qualities of the various kinds of currency in use that private business is sometimes obstructed and the Treasury Department is constantly embarrassed in conducting the fiscal operations of the Government. There are now in circulation nine different kinds of currency, all except two being dependent directly or indirectly upon the credit of the United States. One statute requires the Secretary of the Treasury to redeem the old legal-tender notes in coin on presentation, and another compels him to reissue them, so that, no matter how often they are redeemed, they are never actually paid and extinguished. The act of July 14, 1890, provides that the Treasury notes issued in payment for silver bullion shall be redeemed in gold or silver coin at the discretion of the Secretary, and when so redeemed may be reissued; but the same act also provides that no greater or less amount of such notes shall be outstanding at any time than the cost of the silver bullion and the standard silver dollars coined therefrom then held in the Treasury purchased by such notes, and consequently, when these notes are redeemed with silver coined from the bullion purchased under the act, they can not be reissued, but must be retired and canceled, for otherwise there would be a greater amount of notes outstanding than the cost of the bullion and coined dollars "then held in the Treasury." In this manner notes to the amount of $2,625,984 have been retired and canceled since August last, and standard silver dollars have taken their places in the circulation. If redeemed in gold coin, the notes might be lawfully retired or reissued in the discretion of the Secretary; but the condition of the Treasury has been, and is now, such that practically no discretion exists, for the reason that the necessities of the public service and the requirements of the coin reserve compel him to reissue them in defraying the expenditures of the Government or in procuring coin to replenish that fund.

One of the principal difficulties encountered by the Treasury Department results from the indisposition of the public to retain standard silver dollars and silver certificates in circulation. It requires constant effort on the part of the Treasury officials to pre-

vent the certificates especially from accumulating in the subtreasuries to the exclusion of legal-tender currency. Why this should be the case is not easily understood, for, although these certificates are not legal tender in the payment of private debts, they are, by the acts of 1878 and 1886, made receivable for all public dues, and by the act of May 12, 1882, national banks are authorized to hold them as part of their lawful reserves. With the policy of maintaining equality in the exchangeable value of all our currency firmly established, and the further accumulation of silver bullion arrested, there is no substantial reason why the silver certificate should not be as favorably received and as liberally treated by the public as any other form of note in circulation; and, for the purpose of creating a greater demand for their permanent use in the daily transactions of the people, I have directed that, as far as the law permits, and as rapidly as the opportunity is afforded, the amount of such certificates of denominations less than $10 shall be increased by substituting them for larger ones to be retired, and that the small denominations of other kinds of currency shall be retired as they are received into the Treasury and larger ones substituted in their places.

There are now outstanding United States legal-tender notes to the amount of $67,944,941 in denominations less than $10; Treasury notes issued under the act of 1890 of denominations less than $10, $64,688,489, and national-bank notes, $63,381,916. There is express authority in the act of August 4, 1886, to substitute small silver certificates for larger ones, and the Secretary of the Treasury also has power to make such changes as he may deem proper in the denominations of the Treasury notes issued under the act of July 14, 1890, but Congress, in the sundry civil appropriation act approved March 3, 1893, provided that no part of the money therein appropriated to defray the expenses of the Bureau of Engraving and Printing should be expended for printing United States legal-tender notes of larger denominations than those retired or canceled. As the law now specifically designates the denominations in which national-bank notes shall be issued, they can not be changed without further legislation, and consequently during the present fiscal year, at least, the $64,688,489 in small Treasury notes are the only ones that can be lawfully retired to enlarge the use of small silver certificates. I am of the opinion that if this policy can be carried out to the extent of supplying the country with small silver certificates to an amount sufficient to conduct the ordinary cash transactions of the people, and if, during the same time, certificates of the largest denominations were

issued in the places of others retired, so as to encourage the national banks to hold them as parts of their lawful reserves, the existing difficulties would be removed, and ultimately a larger amount of such currency than is now in circulation could be conveniently and safely used.

The Treasury now holds 140,699,760 fine ounces of silver bullion, purchased under the act of July 14, 1890, at a cost of $126,758,218, and which, at the legal ratio of 15.988 to 1, would make 181,914,899 silver dollars. The act provided that after the first day of July, 1891, the Secretary of the Treasury should coin as much of the bullion purchased under it as might be necessary to provide for the redemption of the notes, and that any gain or seigniorage arising from such coinage should be accounted for and paid into the Treasury. It is plain from this, and other provisions of the act, that so much of the bullion as may be necessary, when coined, to provide for the redemption of the entire amount of notes outstanding, is pledged for that purpose, and can not be lawfully used for any other; but it was decided by the late Attorney-General, and by my predecessor in office, that the so-called gain or seigniorage resulting from the coinage as it progressed constituted a part of the general assets of the Treasury, and that certificates could be legally issued upon it, notwithstanding the act of 1890 is silent upon the latter subject.

The coinage of the whole amount of this bullion, which would employ our mints, with their present capacities, for a period of about five years, would, at the existing ratio, increase the silver circulation during the time named $55,156,681 from seigniorage, besides such additions as might be made in the meantime by the redemption of Treasury notes in standard silver dollars. In order that the Department might be in a condition to comply promptly with any increased demand that may be made upon it by the public for standard silver dollars or silver certificates, or that it might take advantage of any favorable opportunity that may occur to put an additional amount of such currency in circulation without unduly disturbing the monetary situation, I have caused a large amount of bullion to be prepared for coinage at New Orleans and San Francisco, and have ordered the mints at those places to be kept in readiness to commence operations at any time when required.

E. *A Plea for the Free Coinage of Silver, 1896* [1]

When the Democrats met in their National Nominating Convention at Chicago in 1896, it was generally expected that a bitter contest would arise over the free

[1] Contemporary Newspapers, July 8 and 9, 1896.

silver question. Delegates from the west and the south were united in demanding the remonetization of silver, while the bulk of the opposition came from the eastern states. The logical presidential candidate of the free silver men was Richard P. (Silver Dick) Bland of Missouri, for he had been their spokesman for years, and but for an unexpected occurrence he would in all probability have been selected by them as their standard bearer. As it turned out, however, a new champion of the free silver cause arose to displace him. William Jennings Bryan, in a stirring speech, in which he declared the industrial evils, through which the country was then going, to have been caused by the single gold standard, stated the cause of the free silver men so eloquently that they named him as their candidate for president. Important portions of this speech follow:

Never before in the history of this country has there been witnessed such a contest as that through which we have just passed. Never before in the history of American politics has a great issue been fought out as this issue has been, by the voters of a great party. On the fourth of March, 1895, a few Democrats, most of them members of Congress, issued an address to the Democrats of the nation, asserting that the money question was the paramount issue of the hour; declaring that a majority of the Democratic party had the right to control the action of the party on this paramount issue; and concluding with the request that the believers in the free coinage of silver in the Democratic party should organize, take charge of, and control the policy of the Democratic party. Three months later, at Memphis, an organization was perfected, and the silver Democrats went forth openly and courageously proclaiming their belief, and declaring that, if successful, they would crystallize into a platform the declaration which they had made. Then began the conflict. With a zeal approaching the zeal which inspired the crusaders who followed Peter the Hermit, our silver Democrats went forth from victory unto victory until they are now assembled, not to discuss, not to debate, but to enter up the judgment already rendered by the plain people of this country. In this contest brother has been arrayed against brother, father against son. The warmest ties of love, acquaintance and association have been disregarded; old leaders have been cast aside when they refused to give expression to the sentiments of those whom they would lead, and new leaders have sprung up to give direction to this cause of truth. Thus has the contest been waged, and we have assembled here under as binding and solemn instructions as were ever imposed upon representatives of the people. . . .

And now, my friends, let me come to the paramount issue. If they ask us why it is that we say more on the money question than we say upon the tariff question, I reply that, if protection

has slain its thousands, the gold standard has slain its tens of thousands. If they ask us why we do not embody in our platform all the things that we believe in, we reply that when we have restored the money of the Constitution all other necessary reforms will be possible; but that until this is done there is no other reform that can be accomplished.

Why is it that within three months such a change has come over the country? Three months ago, when it was confidently asserted that those who believe in the gold standard would frame our platform and nominate our candidates, even the advocates of the gold standard did not think that we could elect a President. And they had good reason for their doubt, because there is scarcely a State here to-day asking for the gold standard which is not in the absolute control of the Republican party. . . .

You come to us and tell us that the great cities are in favor of the gold standard; we reply that the great cities rest upon our broad and fertile prairies. Burn down your cities and leave our farms, and your cities will spring up again as if by magic; but destroy our farms and the grass will grow in the streets of every city in the country.

My friends, we declare that this nation is able to legislate for its own people on every question, without waiting for the aid or consent of any other nation on earth; and upon that issue we expect to carry every State in the Union. I shall not slander the inhabitants of the fair State of Massachusetts nor the inhabitants of the State of New York by saying that, when they are confronted with the proposition, they will declare that this nation is not able to attend to its own business. It is the issue of 1776 over again. Our ancestors, when but three millions in number, had the courage to declare their political independence of every other nation; shall we, their descendants, when we have grown to seventy millions, declare that we are less independent than our forefathers? No, my friends, that will never be the verdict of our people. Therefore, we care not upon what lines the battle is fought. If they say bimetallism is good, but that we cannot have it until other nations help us, we reply that, instead of having a gold standard because England has, we will restore bimetallism, and then let England have bimetallism because the United States has it. If they dare to come out in the open field and defend the gold standard as a good thing, we will fight them to the uttermost. Having behind us the producing masses of this nation and the world, supported by the commercial interests, the laboring interests, and the toilers everywhere, we will answer their demand for a gold standard by saying to

them: You shall not press down upon the brow of labor this crown of thorns, you shall not crucify mankind upon a cross of gold.

V. The Monetary Stock

A. *The Trade Dollar, 1873–1878*[1]

The coinage act of 1873, which had omitted any mention of the standard silver dollar, provided for coining a trade dollar of 420 grains to be circulated in the Orient. The extent to which it was used and the manner of speculating in it were set forth in a leading financial journal as follows:

To what extent the trade dollar has been used in a speculative way — buying it, approximately, by weight, and replacing it in circulation by tale — there are no means of knowing. Its circulation, as will be apparent to everybody who takes note of his own experience, has been large since the decline in silver, about 18 months ago, permitted it; on the other hand, although over 11 millions of the new "standard" dollars have been coined since last February — while but 8 millions of the "dollar of our fathers" were coined, from 1793 to 1873 — only a little more than one million of them have as yet been got into circulation and their appearance in retail trade is not at all common. The Government is entirely free from fault as regards the trade dollar, for it will be noticed that its action was simply this: to convert, into trade dollars, for its owners, any silver bullion presented, at actual cost, leaving the parties receiving them to dispose of them as they could; Government neither received them nor paid them out, simply stamping and returning them. By the same abused act of 1873, which "demonetized" the old 412½ grain dollar by omitting it from the list of coins, the trade dollar was both authorized and was made legal tender; but no wrong was done by this, because it was then worth more than 100 cents and the subsequent decline of silver was not foreseen. The law contemplated the exclusive use of the coin in export trade; at least once before the present time, upon its appearing that the supply exceeded the demand for that purpose, the coinage was suspended. Obviously, Government had no power to control the course of the coin, and in abrogating its legal-tender quality as soon as another use for it was opened, and now in suspending its coinage, has done all which could be demanded.

Still, the question remains, what is to be done with the trade dollars, which are now at a discount and are liable to become a nuisance.

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[1] *Commercial and Financial Chronicle* (New York, 1878), XXVII, 187.

Some urge that Government is legally bound to redeem, at their face, all dollars coined before July 22, 1876. There were coined, in 1874, $3,588,900; in 1875, $5,697,500; in 1876, $6,132,950; in 1877, $9,162,900; and if the statement in a Washington dispatch is correct that the total is $35,959,360, there must have been $11,378,010 coined during the fiscal year just ended. The rate of coinage increased yearly; the early coinage, of course, went to the East, and it is impossible to ascertain how much of the total is within the country, although it is probable that the bulk of it is of issues since the resolution of 1876, about two-thirds of the whole having probably been put out since then. It is also urged, and with some reason, it appears to us, that, as a matter of equity, Government ought to take them all at par, or at least to exchange them for the standard dollar, piece for piece; this latter course will probably be proposed to Congress next winter, unless the price of silver changes in the interim, and it is the one which, under the circumstances, ought to be adopted, for the sake of innocent holders who have taken these coins as "dollars," knowing only that they bear the Government stamp, which, by the theory of these days, is held to be potent to "make" anything a good dollar on which it is imprinted. As it will be impracticable to distinguish between holders, the speculative one would have to be allowed to make his profit, for the sake of protecting the innocent one.

To receive the trade dollar for the standard one, at Government offices, will end the trouble; but how could clearer and more public testimony be given to show the unnecessary muddle into which the folly of Congress has brought the coinage? In retiring the trade dollar the Government will "father" a dollar which it never issued, legally speaking, and never intended for circulation. Government will also give the less for the greater, although the difference will be less than exists under the present arrangement for buying bullion; speaking approximately, Government will then give an 88-cent in exchange for a 90-cent dollar, piece for piece, whereas now it only offers to pay 90 cents for the latter, in 88-cent dollars. . . .

B. *Kinds and Amounts of Money in Circulation, 1860–1893* [1]

At the outbreak of the Civil War but two kinds of money circulated in the United States, namely, specie and state bank note. From time to time additions were made to the money stock both in amounts and kinds. Conditions for typical years were as follows:

[1] *Treasury Report, 1893* (Washington, 1893), CVIII, CXI, CXII, CXV.

July 1, 1860

(Population, 31,443,321; circulation per capita, $13.85)

	General stock coined or issued	In Treasury	Amount in circulation
Specie	$235,000,000	$6,695,225	$228,304,775
State-bank notes	207,102,477	.....	207,102,477
	$422,102,477	$6,695,225	$435,407,252

July 1, 1862

(Population, 32,704,000; circulation per capita, $10.23)

State-bank notes	$183,792,079	.....	$183,792,079
United States notes	96,620,000	$23,754,335	72,865,665
Demand notes	53,040,000	.....	53,040,000
	$333,452,079	$23,754,335	$309,697,744
Add: Specie in circulation on the Pacific coast			25,000,000
			$334,697,744

July 1, 1863

(Population, 33,365,000; circulation per capita, $17.84)

Fractional currency	$20,192,456	$4,308,074	$15,884,382
State-bank notes	238,677,218	.....	238,677,218
United States notes	387,646,589	75,165,171	312,481,418
Demand notes	3,351,020	.....	3,351,020
	$649,867,283	$79,473,245	$570,394,038
Add: Specie in circulation on the Pacific coast			25,000,000
			$595,394,038

July 1, 1864

(Population, 34,046,000; circulation per capita, $19.67)

Fractional currency	$22,894,877	$3,762,376	$19,132,501
State-bank notes	179,157,717	.....	179,157,717
United States notes	447,300,203	32,184,213	415,115,990
National-banks note	31,235,270	.....	31,235,270
	$680,588,067	$35,946,589	$644,641,478
Add: Specie in circulation on the Pacific coast			25,000,000
			$669,641,478

July 1, 1878

(Population, 47,598,000; circulation per capita, $15.32)

	General stock coined or issued	In Treasury	Amount in circulation
Standard silver dollars, including bullion in Treasury	$16,269,079	$15,059,828	$1,209,251
Subsidiary silver	60,778,828	6,860,506	53,918,322
Silver certificates	1,462,600	1,455,520	7,080
Fractional currency	16,547,769	180,044	16,367,725
United States notes	346,681,016	25,775,121	320,905,895
National-bank notes	324,514,284	12,789,923	311,724,361
	$766,253,576	$62,120,942	$704,132,634
Add: Specie in circulation on the Pacific coast			25,000,000
			$729,132,634

July 1, 1879

(Population, 48,866,000; circulation per capita, $16.75)

Gold coin, including bullion in Treasury	$245,741,837	$135,236,475	$110,505,362
Standard silver dollars, including bullion in Treasury	41,276,356	33,239,917	8,036,439
Subsidiary silver	70,249,985	8,903,401	61,346,584
Gold certificates	15,413,700	133,880	15,279,820
Silver certificates	2,466,950	2,052,470	414,480
United States notes	346,681,016	45,036,904	301,644,112
National-bank notes	329,691,697	8,286,701	321,404,996
	$1,051,521,541	$232,889,748	$818,631,793

July 1, 1893

(Population, 66,946,000; circulation per capita, $23.85)

Gold coin including bullion in Treasury	$597,697,685	$189,162,022	$408,535,663
Standard silver dollars, including bullion in Treasury	538,300,776	481,371,103	56,929,673
Subsidiary silver	77,415,123	11,945,257	65,469,866
Gold certificates	94,041,189	1,399,000	92,642,189
Silver certificates	330,957,504	4,133,656	326,823,848
Treasury notes, act July 14, 1890	147,190,227	6,334,613	140,855,614
United States notes	346,681,016	27,621,590	319,059,426
Currency certificates, act June 8, 1872	12,405,000	690,000	11,715,000
National-bank notes	178,713,872	4,043,906	174,669,966
Total	$2,323,402,392	$726,701,147	$1,596,701,245

VI. Panics and Crises

A. *The Panic of 1873*[1]

During the past hundred years the United States has suffered severely from several panics and crises. The first came in 1819. Others followed more or less periodically in 1837, 1857, 1873, 1884, 1893 and 1907. Of these one of the most severe occurred in 1873. A detailed description of conditions follows:

The monetary crisis of 1873 may be said to have had its beginning in New York City on September 8, by the failure of the Warehouse Security Company, and of two houses which had left their regular business to embark in enterprises foreign thereto, which were followed on the 13th by the failure of a large firm of stock-brokers. On the 18th and 19th two of the largest banking-houses in the city, well known throughout the country, and which were interested in the negotiations of large amounts of railroad securities, also failed; and on the 20th of the same month the failures of the Union Trust Company, the National Trust Company, the National Bank of the Commonwealth, and three other well-known banking-houses were announced. On the same day the New York Stock Exchange, for the first time in its existence, closed its doors, and they were not again opened for a period of ten days, during which period legal-tender notes commanded a premium over certified checks of from one-fourth of one per cent. to three per cent. An active demand for deposits commenced on the 18th, and increased rapidly during the 19th and 20th, chiefly from the country correspondents of the banks; and their drafts continued to such an extent, "calling back their deposits in a medium never before received," that the reserves of the banks were alarmingly reduced.

The "call loans," amounting to more than sixty millions of dollars, upon which the banks relied to place themselves in funds in such an emergency, were entirely unavailable, because the means of the borrowers, upon the realization of which they depended to repay their loans were, to a great extent, pledged with the banks. These collaterals could in ordinary times have been sold, but at that moment no market could be found except at ruinous sacrifices. Had there been a market, the payments would have been made in checks upon the associated banks, which would not have added to the general supply of cash. A meeting of the clearing house association was called, and on Saturday evening, September 20, the following

[1] *Treasury Report, 1873* (Washington, 1873), 90–2.

plan for facilitating the settlement of balances at the clearing-house was unanimously adopted:

In order to enable the banks of this association to afford such additional assistance to the business community, and also for the purpose of facilitating the settlement of the exchanges between the banks, it is proposed that any bank in the clearing-house association, may, at its option, deposit with a committee of five persons, to be appointed for that purpose, an amount of its bills receivable, or other securities to be approved by said committee, who shall be authorized to issue therefor to said depositing bank certificates of deposit, bearing interest at seven per cent. per annum, in denominations of five and ten thousand dollars, such as may be desired, to an amount not in excess of seventy-five per cent. of the securities or bills receivable so deposited.

Except when the securities deposited shall consist of either United States stocks or gold certificates, the certificates of deposit may be issued upon the par value of such securities.

These certificates may be used in settlement of balances at the clearing-house for a period not to extend beyond the first of November proximo, and they shall be received by creditor banks during that period daily, in the same proportion as they bear to the aggregate amount of the debtor balances paid at the clearing-house.

The interest which may accrue upon these certificates shall, on the 1st day of November next, or sooner, should the certificates all be redeemed, be apportioned among the banks which shall have held them during that time.

The securities deposited with the committee, as above named, shall be held by them as a special deposit, pledged for the redemption of the certificates issued thereon.

The committee shall be authorized to exchange any portion of said securities for an equal amount of others, to be approved by them, at the request of the depositing bank, and shall have power to demand additional security, either by an exchange or an increased amount, at their discretion.

The amount of certificates which this committee may issue as above shall not exceed ten million dollars.

This arrangement shall be binding upon the clearing-house association when assented to by three-fourths of its members.

The banks shall report to the manager of the clearing-house every morning at 10 o'clock the amount of such certificates held by them.

That, in order to accomplish the purposes set forth in this arrangement, the legal tenders belonging to the associated banks shall be considered and treated as a common fund, held for mutual aid and protection, and the committee appointed shall have power to equalize the same by assessment, or otherwise, at their discretion.

For this purpose a statement shall be made to the committee of the condition of each bank on the morning of every day, before the commencement of business, which shall be sent with the exchanges to the manager of the clearing-house, specifying the following items:

1st. Amount of loans and discounts.

2d. Amount of loan certificates.

3d. Amount of United States certificates of deposit and legal-tender notes.

4th. Amount of deposits, deducting therefrom the amount of special gold deposits.

The suspension of currency payments followed and was at first confined to the banks of New York City, but afterward extended to other large cities because the New York banks could not respond to the demands of their correspondents in those cities, and these, in turn, could not respond to the demands of *their* correspondents. Exchange on New York, which would otherwise have commanded a slight premium, was at a discount, and to a considerable extent unavailable. The suspension of the banks in other leading cities, almost without exception, therefore followed, and their partial or entire suspension continued for forty days, until confidence was in a measure restored by the resumption of the New York City banks on the first day of November.

Although predictions had been made of the approach of a financial crisis, there were no apprehensions of its immediate occurrence. On the contrary there were in almost every direction evidences of prosperity. The harvest was nearly or quite completed, and the bins and granaries were full to overflowing. The manufacturing and mining interests had also been prosperous during the year, and there was good promise that the fall trade, which had opened, would be as large as during previous years. The value of the cereals, potatoes, tobacco, and hay for 1872, is estimated by the Department of Agriculture at $1,324,385,000. It is supposed that the value of these products for the present year, a large portion of which was at this time ready for sale and awaiting shipment to market, will not vary materially from the above-mentioned estimate of last year. An estimate based upon the census returns of 1869 gives the probable aggregate value of the marketable products of industry for that year at $4,036,000,000, and a similar estimate upon the same basis, and upon returns to the Agricultural Department, gives an increase of $1,788,000,000 for 1873 over the amount for 1868.

It is not the province of the Comptroller to explain the causes which led to this suspension. In order to enter upon such an explanation it would be necessary to obtain comparative data for a series of years in reference to the imports and exports, the products of industry, the issue of currency and other evidences of debt, and, in fact, a general discussion of the political economy of the country. The immediate cause of the crisis is, however, more apparent. The money market had become overloaded with debt, the cost of railroad construction for five years past being estimated to have been $1,700,000,000, or about $340,000,000 annually; while debt based upon almost every species of property — State, city, town, manufacturing cor-

porations, and mining companies — had been sold in the market. Such bonds and stocks had been disposed of to a considerable extent in foreign markets, and so long as this continued the sale of similar securities was stimulated, and additional amounts offered. When the sale of such securities could no longer be effected abroad, the bonds of railroads and other enterprises of like nature which were in process of construction were thus forced upon the home market, until their negotiation became almost impossible. The bankers of the city of New York, who were burdened with the load, could not respond to the demands of their creditors, the numerous holders of similar securities became alarmed, and the panic soon extended throughout the country.

B. *The Financial Crisis of 1884* [1]

In 1884 occurred a financial crisis, caused, as is generally believed, by an over-investment in railroad building. The Comptroller of the Currency reported on the situation at the time as follows:

Owing to the large number of mercantile failures which had occurred during 1883, considerable financial uneasiness was felt at the beginning of 1884, and the year opened inauspiciously, by the appointment on January 1 of a receiver for the New York and New England Railroad. Following closely upon this failure were the troubles of the Oregon and Transcontinental Company, and the appointment on January 12 of a receiver for the North River Construction Company. The months of February, March, and April were characterized by many commercial failures, rumors affecting the credit of various corporations, and a still further depreciation in price of stocks and bonds, and in fact of all products and commodities.

This feeling of uneasiness and of uncertainty as to value culminated on May 6 with the failure of the Marine National Bank of New York whose president was a member of the firm of Grant & Ward. The failure of this firm immediately followed, and owing to the prominence of some of its members and its large liabilities, exceeding $17,000,000, its failure caused great excitement, that had not subsided when on May 13 the president of the Second National bank of New York was discovered to be a defaulter to the extent of $3,185,000. Although this defalcation was immediately made good by the directors of the bank and did not result in its suspension or failure, such a shock was given to credit, and the confidence of the public in all institutions and firms supposed to have loaned money upon such rail-

[1] *Report of the Comptroller of the Currency, 1884* (Washington, 1884), 32–5.

road and other securities as had greatly decreased in value or whose managers were supposed to be directly or indirectly interested in speculation in Wall Street, was so shaken, that there was great pressure to sell stocks and securities and an active demand on the banks for deposits. . . .

The crisis of May, 1884, seems to have been even more unexpected to the country than that of September, 1873. Although many conservative people had predicted that the large increase in railroad and other securities, and the general inflation which had been going on for a number of years would bring financial troubles and disasters to the country, it was nevertheless generally believed that the depreciation of values and the liquidation which had already been going on for many months, and the further facts that the country was doing business upon a gold basis, that the prices of all commodities were already very low, that an increased area of territory was under cultivation, and that the prospects were excellent for good crops, together with the larger distribution of wealth throughout the Union, would prevent a repetition of the panic of 1873. This general belief was measurably correct, as the panic or crisis was confined principally to New York City, although its effects were more or less felt in all parts of the country, and the liquidation resulting therefrom has not yet been fully completed.

The most profound students of political economy have for many years endeavored to explain the causes which have led to financial troubles similar to those of 1857, 1873, and 1884, and it is not to be expected that the Comptroller can obtain sufficient data to enter into a complete and satisfactory explanation of the causes of the financial disturbances of the present year. The causes that lead to financial crises in a country so rich in agriculture, of which the manufacturing and mining interests are so varied and important, the imports and exports so great, of so extensive an area of territory, and in which wealth is becoming so equally distributed, and the population of which is increasing so rapidly, are difficult to explain, and the issue of currency and creation of debt require elaborate study to ascertain the reasons for the rise and fall in value of commodities and realty which cause a panic. It is scarcely possible at this time to explain why it should be necessary for the country to go through the liquidation and financial trouble which is now being experienced.

It is apparent, however, that a repetition of some of the same circumstances which brought about the monetary crisis of 1873 has been largely influential in causing the present crisis. Property of all

kinds had been capitalized, as it is called; bonds and stocks had been issued for the purpose of building railroads, carrying on manufacturing and other business; municipal and other bonds had been issued for public improvements. These bonds and stocks were put upon the market, and commercial credit was extended until a point was reached where capitalists of this and other countries questioned the intrinsic value of these securities and the earning power of the property on which they were based, and also doubted the solvency of many firms in commercial business. This lack of confidence induced them to decline to make farther advances or investments. A decrease in the earnings of railroads, manufacturing, and other enterprises followed, and the entire business of the country has consequently been restricted and deadened.

There is little doubt that one of the causes which led to the local disturbances among the banks, national and State, and private bankers of the city of New York, was their intimate relation in many instances to the New York Stock Exchange, and the fact that a large portion of the loans made by the banks and bankers of New York were based upon the security of stocks and bonds, often speculative in their character, which are dealt in and regularly called at the Stock Board. . . .

Just what restrictions should be placed upon the business of the New York Stock Exchange, or what legislation should be had, is difficult to determine. Just how far the Federal or State law can interfere with the business of private citizens is a delicate and difficult matter to settle.

C. *The Panic of 1907* [1]

The Panic of 1907, which is often referred to as the "rich man's panic," was severe while it lasted. Yet it is generally believed that it would have been still more severe had the financial interests of the country not combined for protection. Thus in New York, for example, the leading banks, through the medium of the clearing house association, issued an emergency currency, designated as clearing house certificates. A view of the panic by the Comptroller of the Currency follows:

Certainly since as long ago as the date of the San Francisco catastrophe there has been no lack of warning indications of financial troubles and possible business disaster. For at least ten or twelve years there has been an era of advancing prices and great industrial, commercial, and speculative activity in all the countries of the world.

[1] *Report of the Comptroller of the Currency, 1907* (Washington, 1907), 69–71.

Credits have increased and multiplied until the limit has been reached in the amount of reserve money on which they must be based.

For at least two or three years, however, it has been becoming more and more evident that there must soon be a slackening of pace if we were to avoid a general and universal crisis in financial and commercial affairs. These conditions have been world-wide and not by any means confined to the United States. Crises of more or less severity have arisen in several important countries. As is always the case when there is a demand for liquidation, it first manifested itself in the stock market. For months there has been a more or less steady decline in stock-market quotations. Not only stocks, but the very best bonds, have dropped lower and lower in price. The difficulty in selling bonds has become so great that for several years many of the railways have had to raise money for their necessary expenditures and improvements with so-called short time notes, instead of regular bond issues, the rates of interest on such issues rising higher and higher and each issue being harder to place. Merchants and manufacturers of the highest standing and credit have found it more and more difficult to secure or renew loans and the rates have risen steadily for months past.

With such conditions existing we approached the autumn crop-moving period, when there is always more or less disturbance of credit on account of currency shipments and withdrawals of balances from the reserve cities. For a time it seemed as if there were good reason to hope that there might be no more than a gradual liquidation which might be conducted in detail, one interest or line at a time, beginning with the stock market, and that while there might be a general decline in the volume of trade and the gradual liquidation of credits, it would not develop into a bank or commercial crisis. But during the month of October the collapse of a highly speculative corner in stocks, dealt in on the "curb" in New York — not even listed on any regular exchange — brought suspicion upon an old, well-established national bank in the city of New York. Although examinations by the national-bank examiners and the New York clearing house committee showed this bank to be entirely solvent, with its large capital and a considerable surplus still beyond question intact, public interest had been aroused to such an extent that runs developed in New York City on a number of other banks and trust companies and some national banks between which and the bank first under attack there was known to be community of ownership and management. The national banks of New York City were all found to be solvent

by the clearing house committee, and being supported by the clearing house banks none failed.

But, unfortunately, a few other banks and trust companies were not in such good condition, and many of them, not being members of the clearing house or any similar association, they were not so well prepared for cooperation and support of each other. The Knickerbocker Trust Company, with $1,200,000 of capital and $48,387,000 of deposits, closed its doors on October 22, and this was followed by a large number of failures among smaller banks and trust companies. During the months of October and November ten State banks and trust companies, two of which have since resumed, closed their doors in New York City and vicinity. There were long and serious runs on two large trust companies, which were only kept from failure by the support of the other trust companies and the clearing-house banks. One national bank, the First National Bank of Brooklyn, which was clearing-house agent for two large trust companies in Brooklyn which had failed, was compelled to close its doors on October 25 in order to avoid the responsibility for the clearings of these trust companies, and is now in the hands of a receiver.

On October 26 the New York clearing-house banks decided to issue clearing-house certificates for use in the payment of balances, and to limit, if not suspend, the shipment of currency to out-of-town banks. In this the New York banks were followed by those of the other central reserve and most of the reserve cities. The result was to at once precipitate a most serious bank crisis and a famine of currency for pay rolls and other necessary cash transactions. All domestic exchanges were at once thrown into disorder and the means of remittance and collection were almost entirely suspended. Money has been withdrawn and hoarded by individuals, corporations, and even more, perhaps, by the banks themselves, all of whom at once drew and held all the money of any kind they could obtain, often really in larger sums than needed.

It has been one of the peculiar features of the situation that there has actually been more of a panic among the banks themselves than there has been among the people. The banks have been fearful as to what might develop, and finding their usual reserve deposits only partially available, if available at all, they have been compelled in self-protection to gather from every source all the money they could possibly reach and to hold on to it by refusing payment wherever it is possible and satisfying their customers with the smallest possible amount of cash. It has been remarkable how patiently and with

what forbearance the people in the business community generally have borne with the situation and helped the banks to deal with the emergency. With the exception of the first excitement in New York and some smaller runs in other places, there has really been surprisingly little excitement or uneasiness among the people.

The greatest hardship to business generally has been the derangement of the machinery for making collections and remittances. As can readily be seen, this has interfered with every kind and class of business and led to great curtailment of business operations of every kind. Factories have suspended, workmen have been thrown out of employment, orders have been canceled, the moving of crops has been greatly retarded and interfered with and exports have fallen off at a time of the year when they should be at their highest. Another result has been a reduction of the volume of the foreign credits available just at the time they are most needed to offset the large imports of gold which have been made.

CHAPTER XXI

MANUFACTURES, TARIFF, AND TRUSTS, 1860-1915

I. Manufactures

A. *Conditions of Industrial Progress, 1901*[1]

The fundamental conditions of the industrial progress of a country are here excellently stated by the Industrial Commission. This commission was created by act of Congress in 1898 for the purpose of investigating general industrial conditions. For two years they took testimony and made investigations and in 1900–1902 published their report in nineteen volumes. This constitutes one of our most complete and authentic records of recent industrial developments.

The increase in the manufactures and commerce of the United States during the past half century has been enormous. It is characteristic of progress in civilization, with the usual greater aggregate productive power on the part of the people which accompanies it, that manufactures, transportation, and trade should increase in greater proportion than agriculture and mining. The amount of food and other raw material required increases, for the most part, but little more rapidly than the population. If the productive power of the people, therefore, increases by a much higher ratio, labor is set free from the task of producing the raw materials, the absolute necessities of life, and may devote itself to elaborating materials so that they shall supply higher needs and appeal to more developed tastes. The employments of the world thus become more and more diversified. Because of the wonderful improvements in means of production, the same amount of labor can accomplish vastly more than it could fifty or one hundred years ago. A great variety of new products and new services, unknown to the past generations, has been introduced, and the people generally are able to enjoy products formerly accessible to the few only; and the quality of goods, even those consumed by the poorer classes, has risen greatly. . . .

Probably in no other country has the progress of the industrial system been so rapid as in the United States. A study of our economic

[1] *Final Report of the Industrial Commission.* (Washington, 1902), XIX, 485, 515, 518.

history shows that the introduction and improvement of machinery, and the progress in methods of industrial organization and administration, have resulted in making the individual more productive, and worth more per unit of his time; that he has therefore received continually a greater compensation; that his increased income has given him increased purchasing power, and that this gain in purchasing power has so increased the demand for manufactured articles as much more than to counterbalance the original displacement of labor by these improvements. . . .

The fundamental elements of efficiency in industrial production, in the United States as in any country, are perhaps summed up as —

1. The character of the people, as given form by race, environment, and especially by social and political influences.

2. The physical condition of the people, as determined by their food, their habits of life, and exercise.

3. The skill and efficiency of the people as tool users.

4. The quantity and productivity of tools, as determined by design and construction, and by combination of the man and the machine under all the preceding conditions.

5. The effective organization of business for economizing all productive and distributive forces.

Given a people of constitutional vigor and intelligence, with a talent for invention and construction, with political freedom and without social caste control, with a good system of education of mind and of hand, with abundance of wholesome food and a working day of proper length, with vocation and general opportunity free to all, and they will soon acquire tools and machinery, and skill in their use, and will promptly attain ability to promote their own elevation in maximum degree in minimum time. These conditions are probably at the moment illustrated in larger measure in the industrial system of the United States than in any other nation, though progress toward their fulfilment is rapid over all the civilized world. . . .

B. *Growth of Manufactures, 1850–1880*[1]

A striking feature of the following tables is the tremendous leap shown by our manufacturing industries between 1860 and 1870, under the stimulus of war demand and war prices. Manufactures were highly localized in the north Atlantic and north central states and were still closely allied to the extractive industries of agriculture and mining.

[1] *Report on the Manufactures of the United States at the Tenth Census.* (Washington, 1883), II, xi–xxi, *passim.*

The growth of the United States in manufacturing industry is one of the most noteworthy features of the present industrial age. It is not easy to say which is the best test of that growth; but the application of any one of the several tests offered by the tables common to the last four censuses shows our national progress in this direction to have been remarkable.

Let us first take the figures representing the gross value of product. . . .

It is noted in another place (see introductory notes on the statistics of manufactures) that in comparisons of 1870 with 1880, on the one hand, or with 1860 on the other, it should be borne in mind that the figures for 1870 are stated in a currency which was at a great discount in gold, the average premium on gold being for the twelve months, June 1, 1869, to May 31, 1870, 25.3 per cent., which is closely equivalent to a discount on currency of 20 per cent. If then, we discount the reported values of 1870 by one-fifth, we shall have as our corrected table the following:

Year	Corrected gross value of manufactured products	Corrected gain per cent in ten years
1850	$1,019,109,616	.....
1860	1,885,861,676	85.05
1870	3,385,860,354	79.54
1880	5,369,579,191	58.59

Again, we may inquire what has been the increase in the net value of manufactured products reported in the four successive censuses taken for the purposes of this comparison; that is, the value of the products after deduction of the value of the materials consumed: . . .

Year	Corrected net value of manufactured products	Corrected gain per cent in ten years
1850	$ 463,935,296	.....
1860	854,256,584	84.13
1870	1,395,118,560	63.31
1880	1,972,755,642	41.40

Again, we may take the figures of capital reported as invested in manufacturing industries at the successive periods under consideration, as affording a certain measure of the growth of the country in industrial power, although there is too much reason to believe that the returns of capital have always been gravely defective, for reasons which will be adverted to hereafter. Assuming, however, that the liability to omission or defective statement remained of constant force from 1850 to 1880, we should have the following progressive results: . . .

Year	Corrected amount of capital invested in manufactures	Corrected gain per cent in ten years
1850	$ 533,245,351	.....
1860	1,009,855,715	89.38
1870	1,694,567,015	67.80
1880	2,790,272,606	64.66

Again, we may take for comparison the amount of manufacturing wages paid in each of the years 1850, 1860, 1870, and 1880: . . .

Year	Corrected amount of manufacturing wages paid	Corrected gain per cent in ten years
1850	$236,759,464	.....
1860	378,878,966	60.03
1870	620,467,474	63.76
1880	947,953,795	52.78

If, again, we were to take the number of hands employed as the test of the manufacturing power of the country on the several dates named, we should have the following table:

Year	Number of hands employed	Gain per cent in ten years
1850	958,079	.....
1860	1,311,246	36.86
1870	2,053,996	56.64
1880	2,732,595	33.04

. . . The geographical distribution of manufactures throughout the United States appears by the following tables, as was to be expected, to be governed by very different forces from those which control the distribution of population or of agricultural industry. . . .

The following table presents for 1880 the proportions in which the several geographical groups contribute to the aggregate number of establishments, amount of capital invested, number of hands employed, amount of wages paid, and gross and net values of product:

Groups of states	Number of establishments	Amount of capital invested	Hands employed	Wages paid	Gross product	Net product (i. e., deducting value of materials)
The United States	100.00	100.00	100.00	100.00	100.00	100.00
North Atlantic.. :	44.87	61.94	62.23	64.33	59.64	62.03
South Atlantic...	10.16	5.89	7.59	4.99	5.26	5.30
Northern Central.	34.33	25.78	24.39	24.86	28.94	26.38
Southern Central.	7.55	3.75	3.85	3.11	3.47	3.52
Western.....	3.09	2.64	1.94	2.71	2.69	2.77

. . . Table II of the general statistical tables following [on page 743] distributes the aggregate of our manufacturing industries under 332 titles; of these the following show each a total production of $50,000,000 or over:

. . . Some branches of manufacture are reported for every one of the 47 states and territories; such as blacksmithing, boot and shoe making, the manufacture of tinware, copperware, of sheet-iron ware, and saddlery and harness making. The making or repairing of carriages and the wheelwrighting trade appear in 46 states and territories. The making of bread and other bakery products and the manufacture of furniture are reported from 45 states and territories. Forty-four states and territories return founderies and machine-shops.

It is significant of the habits of the people that while the production of men's clothing in distinct establishments is reported in 43 states and territories, that of women's clothing is reported from only 25, domestic manufacture or custom dress-making taking the place of the shop or factory in supplying this demand in 22 states or territories. The other industries which are reported in as many as 43 states and territories are the manufacture of tobacco or cigars and

Industry	Number of establishments	Value of product
Flouring and grist-mill products	24,338	$505,185,712
Slaughtering and meat-packing, not including retail butchering establishments	872	303,562,413
Iron and steel	1,005	296,557,685
Woolen manufactures, all classes[1]	2,689	267,252,913
Lumber, sawed	25,708	233,268,729
Foundery and machine-shop products	4,958	214,378,468
Cotton goods	1,005	210,950,383
Clothing, men's	6,166	209,548,460
Boots and shoes, including custom work and repairing	17,972	196,920,481
Sugar and molasses, refined	49	155,484,915
Leather, tanned	3,105	113,348,336
Carpentering	9,184	94,152,139
Printing and publishing	3,467	90,789,341
Furniture[2]	5,227	77,845,725
Leather, curried	2,319	71,351,297
Agricultural implements	1,943	68,640,486
Mixed textiles	470	66,221,703
Bread and other bakery products	6,396	65,824,896
Carriages and wagons	3,841	64,951,617
Tobacco, cigars and cigarettes	7,145	63,979,575
Paper	692	55,109,914
Tobacco, chewing, smoking, and snuff	477	52,793,056

the manufacture of confectionery. The distinct manufacture of brooms and brushes is reported from 36 states and territories, and that of mattresses and spring beds from 35. . . .

So much for the wide territorial diffusion of common industries, many of them of a petty character. . . . Of the greater industries, some are widely spread; others intensely concentrated. The greatest of all is the flour and grist-mill industry, aggregating a product of $505,185,712. Of this about one-half is produced by the six states of New York, Illinois, Pennsylvania, Minnesota, Ohio, and Missouri, while yet not less than 24 states produce above $4,000,000 each. This industry involves the consumption of 304,775,737 bushels of wheat and 234,907,220 bushels of other grain, with an aggregate value of all materials reaching $441,545,225. . . .

The next of the great industries is also connected with the supply of

[1] Includes carpets, other than rag; felt goods; hosiery and knit goods; wool hats; woolen goods and worsted goods.

[2] Includes furniture, chairs.

food, viz. slaughtering and meat-packing, which yields an aggregate product of $303,562,413. The concentration of this interest is startling, the single state of Illinois contributing almost one-third of the whole, the single city of Chicago producing $85,324,371. Of the other states, New York follows at a long distance with $43,096,138; Massachusetts, with $22,951,782; New Jersey, with $20,719,640; Ohio, with $19,231,297; Indiana, with $15,209,204; Missouri, with $14,628,630. . . .

Ranking next in order of gross value of product comes the manufacture of iron and steel, with an aggregate of $296,557,685, of which Pennsylvania alone produces $145,576,268. Ohio is the next state as an iron producer, with $34,918,360, or less than one-fourth the product of Pennsylvania. New York, with $22,219,219; Illinois, with $20,545,289; New Jersey, with $10,341,896, and Massachusetts, with $10,288,921, are the only other states rising above ten millions. There are seven other states showing a product of between $10,000,000 and $4,000,000, and six showing between $4,000,000 and $1,000,000. The aggregate value assigned to the product of the iron and steel manufacture is distributed among the principal different classes of works as follows:

Blast furnaces	$ 89,315,569
Bloomaries and forges	3,968,074
Iron rolling mills	136,798,574
Bessemer and open-hearth steel works	55,805,210
Crucible and miscellaneous steel works	10,670,258
Total	296,557,685

. . . Certain industries, not of the highest yet of very considerable importance as to aggregate value of product, are noticeable for their rapid extension at the west. These are furniture, with a product of $77,845,725; agricultural implements, $68,640,486; carriages and wagons, $64,951,617; distilled liquors, $41,063,663. . . .

C. *Manufactures, 1850–1910*[1]

The growing industrialization of the United States in the half century since the Civil War is clearly shown by the marvelous increase in the manufacturing industries of the country as indicated in the following table.

The statistics of manufactures secured at the decennial censuses from 1850 to 1900, inclusive, covered the neighborhood, hand, and building industries, as well as the factory industries, while the reports for 1904 and 1909 were confined to factory industries. . . .

[1] *Thirteenth Census of the United States, Taken in the Year 1910.* Volume VIII: Manufactures (Washington, 1913), 33, 37, 48, 56, 83.

	Number of establishments	Capital	Wage earners (average number)	Wages	Cost of materials	Value of products	Value added by manufacture
Factories and hand and neighborhood industries:							
1849 (census of 1850)	123,025	$533,245,000	957,059	$236,755,000	$555,124,000	$1,019,107,000	$463,983,000
1859 (census of 1860)	140,433	1,009,856,000	1,311,246	378,879,000	1,031,605,000	1,885,862,000	854,257,000
Per cent of increase, 1849 to 1859	14.1	89.4	37.0	60.0	85.8	85.0	84.1
1869 (census of 1870) (gold value)	252,148	1,694,567,000	2,053,996	620,467,000	1,990,742,000	3,385,860,000	1,395,118,000
Per cent of increase, 1859 to 1869	79.6	67.8	56.6	63.8	93.0	79.5	63.3
1879 (census of 1880)	253,852	2,790,273,000	2,732,595	947,954,000	3,396,824,000	5,369,579,000	1,972,755,000
Per cent of increase, 1869 to 1879	0.7	64.7	33.0	52.8	70.6	58.6	41.4
1889 (census of 1890)	355,405	6,525,051,000	4,251,535	1,891,210,000	5,162,014,000	9,372,379,000	4,210,365,000
Per cent of increase, 1879 to 1889	40.0	133.8	55.6	99.5	52.0	74.5	113.4
1899 (census of 1900)	512,191	9,813,834,000	5,306,143	2,320,938,000	7,343,628,000	13,000,149,000	5,656,521,000
Per cent of increase, 1889 to 1899	44.1	50.4	24.8	22.7	42.3	38.7	34.3
Factories, excluding hand and neighborhood industries:							
1899 (census of 1900)	207,514	8,975,256,000	4,712,763	2,008,361,000	6,575,851,000	11,406,927,000	4,831,076,000
1909 (census of 1910)	268,491	18,428,270,000	6,615,046	3,427,038,000	12,142,791,000	20,672,052,000	8,530,261,000
Per cent of increase, 1899 to 1909	29.4	105.3	40.4	70.6	84.7	81.2	76.6

. . . The present report on manufactures distinguishes 264 industries, although for certain purposes some of these are subdivided into two or more branches. . . .

There are three industries which in 1909 reported a value of products exceeding a billion dollars, namely, the slaughtering and meat-packing, foundry and machine-shop, and lumber industries. There are six others whose products exceeded half a billion dollars in value, namely, the steel works and rolling mills, the flour-mill and gristmill industry, printing and publishing, and the manufacture of cotton goods, of men's clothing, and of boots and shoes. . . .

The five leading states in respect to value of manufactured products in 1909 were New York, Pennsylvania, Illinois, Massachusetts, and Ohio. These states together contained 33.2 per cent, or about one-third, of the total population of the United States in 1910, but reported 51.1 per cent of the total number of wage earners in manufacturing industries in 1909, 52.5 per cent of the value of manufactured products, and 53.8 per cent of the value added by manufacture, or a little more than one-half in each case. . . .

New York decidedly outranks any other city in manufacturing, although in proportion to its population its manufacturing interests are relatively less important than in a considerable number of other cities. Nearly one-tenth of the total value of manufactured products for the United States in 1909 was reported from New York City. As judged by the value of products, Chicago ranked second among the manufacturing cities in 1909, followed by Philadelphia, St. Louis, Cleveland, Detroit, Pittsburgh, Boston, Buffalo, Milwaukee, and Newark, in the order named. Each of the 11 cities just named produced in 1909 manufactured products valued at more than $200,000,000.

D. *Rank of the United States as a Manufacturer of Cotton, 1830–1905*[1]

As representative manufacturing industries in this country, the cotton and the iron and steel industries have been selected for more detailed description, and the following six extracts trace their development somewhat more fully. The importance of the textile industry in the United States is best shown by comparing it with those of other countries. Judged by number of spindles or value of product the United States ranks second in the manufacture of cotton.

It is comparatively easy to ascertain the relative rank of the countries in the manufacture of cotton. Two methods may be followed,

[1] *Census of Manufactures:* 1905. Textiles, Bulletin 74 (Washington, 1907), 21–2.

either of which gives an approximation to the truth — the amount of cotton consumed, and the number of spinning spindles. The first statement to be presented shows the average consumption of cotton in the United States, in the United Kingdom, and on the continent of Europe, in the five years ending with each census period of the United States from 1830 to 1880, and the total consumption for the years 1890, 1900, and each succeeding year to 1905:

COTTON CONSUMPTION IN UNITED STATES AND EUROPE: 1830 TO 1905[1]

(Expressed in thousands of bales of 500 pounds each.)

	United States	United Kingdom	Continent of Europe
	AVERAGE CONSUMPTION		
Five years ending—			
1830	104	569	329
1840	204	925	503
1850	442	1,166	621
1860	650	1,812	1,192
1870	700	2,111	1,473
1880	1,234	2,339	1,964
	TOTAL CONSUMPTION		
Year—			
1890	2,386[2]	3,312	3,422
1900	3,856	3,334	4,576
1905	4,310	3,620	5,148

But a far more accurate test for comparison is afforded by the number of spindles in the mills of the several countries. Table 11 [the following table on page 748] shows the number of cotton spindles in the world in the autumn of 1906. . . .

Taking the textile industry as a whole, it may be concluded that the United States, while standing at some distance from the United Kingdom, is nevertheless second only to it. Considering the several branches of the textile industry, we find that the United States stands first among silk manufacturing countries and second in the manufacture of cotton. In the manufacture of wool it is probably inferior

[1] The authority for this statement is Mr. Thomas R. Ellison, of Liverpool.

[2] Census figures.

to Germany and France, although not greatly behind either country.

WORLD'S COTTON SPINDLES, BY COUNTRIES: 1905–6[1]

COUNTRY	Cotton spindles (number)
Total	120,090,595
United States:	
Cotton growing states	8,994,868
All other states	16,255,228
Europe:	
United Kingdom	48,826,144
Germany	9,730,209
Russia	7,000,000
France	6,702,800
Austria	3,621,220
Italy	3,500,000
Spain	1,800,000
Switzerland	1,462,752
Belgium	1,122,000
Portugal	350,000
All other Europe	1,115,000
British India	5,250,000
Japan	1,403,740
China	619,648
Brazil	733,890
Mexico	628,096
Canada	775,000
Other countries	200,000

The flax and jute industries are carried on in this country on a small scale. No figures can be presented to indicate even approximately the rank of the different countries, but there is no doubt that the United States occupies a rank relatively low. On the other hand, the manufacture of cordage and twine from hemp is very extensive, and in this the United States probably takes the first or the second rank.

[1] The statistics for the United States were collected by this Bureau. Those for other countries have been compiled from a number of authorities, among them being the International Federation of Master Cotton Spinners' and Manufacturers' Associations, Manchester, Eng.; the Financial and Commercial Chronicle, New York; Cotton Facts: Lyon & Co., Bombay; and Mitsui Bussan Kaisha, Osaka.

E. *Cotton Manufactures, 1860–1880* [1]

The steadily growing population of the United States with its high standard of living has furnished American manufacturers a market for large quantities of staple goods, in the production of which improved machinery and large-scale methods have been characteristic. In cotton manufactures there was the additional advantage of cheap raw material close at hand.

The cotton manufacture of the United States may now be considered more firmly established than ever before. The method on which the business is conducted in the United States varies greatly from that of any other country; and this difference arises mainly from a difference not only in the habits and customs of the people, but also in their condition and intelligence.

The home market is the most important one, and may long continue to be so, although the export demand for our fabrics now takes from 7 to 8 per cent. of our annual product, and is likely to increase.

In contrast with the cotton manufacturer of Great Britain, our principal rival, we are therefore called upon to meet the demands of an intelligent class of customers living under substantially uniform conditions and varying but little in their requirements. Hence we are not called upon for the great variety of fabrics that must be supplied by Great Britain. In consequence of this demand for a great variety of fabrics, the work of the cotton manufacture of England is much more divided than with us. . . .

The principal market for our own fabrics is found among the thrifty working people, who constitute the great mass of our population.

It has therefore happened that, although we have not until recently undertaken the manufacture of very fine fabrics, the average quality of fabrics that we do make is better than that of any other nation, with the possible exception of France. It is for the wants of the million that our cotton factories are mainly worked, and we have ceased to import staple goods, and shall never be likely to resume their import. . . .

In 1860 the whole number of spindles in the United States was 5,235,000. . . . In 1880 the number of spindles operated in the specific manufacture of cotton fabrics was 10,653,435; but the spindle has changed in its productive power, and each spindle of 1880 was much more effective than that of 1860. . . .

In 1860 the average product of one operative, working one year, was 5,317 pounds; in 1880, 7,928 pounds of drill, such as is exported

[1] *Report on the Manufactures of the United States at the Tenth Census.* (Washington, 1883), II, 946–8.

to China. Assuming 5 pounds, or about 16 yards, as the annual requirement of a Chinaman for dress, in 1860 one Lowell operative, working one year, clothed 1,063 Chinese; in 1880 one could supply 1,586. . . .

F. *Growth of Cotton Manufactures, 1860–1910*[1]

The further growth of the manufacture of cotton goods is here shown, bringing the statistics down to the date of the last census.

The following table gives comparative statistics for the cotton-goods industry, as a whole, from 1859 to 1909, inclusive:

	Number of establishments	Wage earners (average number)	Wages	Cost of materials	Value of products	Value added by manufacture
1909.....	1,324	378,880	$132,859,145	$371,009,470	$628,391,813	$257,382,343
1904.....	1,154	315,874	96,205,796	286,255,303	450,467,704	164,212,401
1899.....	1,055	302,861	86,689,752	176,551,527	339,200,320	162,648,793
1889.....	905	218,876	66,024,538	154,912,979	267,981,724	113,068,745
1879[2]....	756	172,544	42,040,510	102,206,347	192,090,110	89,883,763
1869.....	956	135,369	39,044,132	111,736,936	177,489,739	65,752,803
1859.....	1,091	122,028	23,940,108	57,285,534	115,681,774	58,396,240

G. *Cotton Manufactures in the South, 1890–1900*[3]

One of the most important economic developments of recent years has been the growth of cotton manufacturing in the south. It has meant the industrial awakening of that section of the country, and severe competition for New England mills.

The following tabular statement will bring to light the most interesting and the most important fact relating to the growth of the cotton-manufacturing industry during the decade 1890–1900:

[1] *The Thirteenth Census of the United States, Taken in the Year 1910.* Volume VIII: Manufactures (Washington, 1913), 391.

[2] Does not include 249 mills classed as "special mills" making hosiery, braiding, tapes, and fancy fabrics, and mixed goods or other fabrics not sold as specific manufactures of wool or cotton. In these establishments there were 12,928 employees, receiving $3,573,909 in wages. The cotton consumed cost $2,338,385, and the value of the products was $18,860,273.

[3] *Twelfth Census of the United States.* Census Bulletin 215 (Washington, 1902), 12–3.

SECTIONAL DISTRIBUTION OF ESTABLISHMENTS

GEOGRAPHICAL DIVISIONS	1900	1890	1880
New England states	332	402	439
Middle states	225	239	139
Southern states	400	239	161
Western states	16	25	17
Total	973	905	756

. . . The growth of the industry in the South is the one great fact in its history during the past ten years. It will be seen that in 1880 there were, in that part of the country, 161 establishments only which made reports to the census; in 1890 there were only 239, an increase of 78, or 48.4 per cent; and in 1900 there were 400 separate establishments, an increase from 1890 of 161, or 67.4 per cent. A scrutiny of the returns by states shows that substantially the whole increase in the South has been in the 4 states of North Carolina, South Carolina, Georgia, and Alabama. . . .

The earliest Southern enterprises were not in all cases begun as first-class establishments. Some of them were equipped with discarded machinery from Northern mills. But the manufacturers quickly learned the lesson that there is no industry in which profits are more directly proportioned to the perfection and speed of the machinery than in the spinning and weaving of cotton; and the old spindles and looms were speedily replaced with others of the newest pattern. A great proportion of the mills built and started within the past decade have been thoroughly up to date in all respects. . . .

The growth of the manufacturing industry in the South has been fairly continuous during the past ten years. How large it has been the figures show. For the most part the product of the region has been coarse or medium goods, as is usually the case in the early stages of the industry. . . . A considerable part of the product of the region is exported. The industry is now important enough in the 4 states of North Carolina, South Carolina, Georgia, and Alabama to consume nearly one-third of the crop of cotton grown in those states; and both North Carolina and South Carolina spin more than half the cotton grown within their limits.

H. *The Iron and Steel Industry, 1880* [1]

By 1880 the iron and steel industry of the United States was entering upon the period of development which enabled it in the next two decades to become the leading producer of pig iron and of iron and steel manufactures in the world. Improvements in transportation facilities, the growth of an enormous domestic market, the exploitation of rich deposits of iron ore, and improvements in methods of production all contributed to this development.

The present condition of the iron and steel industries of the United States is one of great prosperity; yet they are subject to disadvantages from which the corresponding industries of other countries are relieved. It is true that it cannot now be said, as it was once said, that they lack the skill, or the capital, or the extensive and complete establishments of other countries; they are no longer infant industries in any sense; nor can it be said that the natural resources for the manufacture of iron and steel in this country are not abundant and varied. But in comparison with the iron and steel industries of other countries they are at a disadvantage in two important particulars. The wages of labor are much higher in this country than in any other ironmaking country in the world; and the raw materials of production, rich and abundant as they are, are in the main so remote from each other that a heavy cost for their transportation is incurred to which no other ironmaking country is subjected.

With reference to wages, a single illustration will show the disparity that exists in the iron and steel industries of this country and Europe. At Pittsburgh the price of puddling, or boiling, iron was fixed for one year on the 30th of May, 1881, in an agreement between the employers and their workmen, at a *minimum* of $5.50 per ton, the price to be advanced if the price of bar iron should advance beyond $2\frac{1}{2}$ cents a pound. Of the $5.50 the puddler's helper receives about one-third. . . . In England the wages of iron and steel workers are probably higher than in any other part of Europe. . . . The wages of puddlers for the three months beginning on the 1st of August, 1881, was 7s. per ton, or about $1.75, of which sum the puddler's helper, in accordance with the English custom, receives about one-third. . . .

With regard to the cost of transporting raw materials in the United States and Europe, the testimony of a distinguished English ironmaster will be sufficient to show the great disparity which exists in the distances over which they must be transported. Mr. I. Lowthian Bell, a

[1] *Report on the Manufactures of the United States at the Tenth Census.* (Washington, 1883), II, 877–8, 886, 888–9.

commissioner from Great Britain to the Philadelphia exhibition of 1876, says in his official report: "The vast extent of the territory of the United States renders that possible which in Great Britain is physically impossible; thus it may and it does happen that in the former distances of nearly 1,000 miles may intervene between the ore and the coal, whereas with ourselves it is difficult to find a situation in which the two are separated by even 100 miles." From the ore mines of Lake Superior and Missouri to the coal of Pennsylvania is 1,000 miles. Collinsville coke is taken 600 miles to the blast furnaces of Chicago, and 750 miles to the blast furnaces of St. Louis. The average distance over which all the domestic iron ore which is consumed in the blast furnaces of the United States is transported is not less than 400 miles, and the average distance over which the fuel which is used to smelt it is transported is not less than 200 miles. . . .

But it is not only on the raw materials that the cost of transportation operates as an impediment to low prices for manufactured products. The manufactured products themselves must frequently be transported long distances to find consumers. . . .

The people of the United States are the largest *per capita* consumers of iron and steel in the world, and of all nations they are also the largest aggregate consumers of these products. Great Britain makes more iron than we do, but she exports about one-half of all that she makes. She exports more than one-half of the steel that she makes, and yet makes but little more than this country. No other European country equals Great Britain either in the *per capita* or aggregate consumption of iron and steel. This country is not now producing as much iron and steel as it consumes, but imports large quantities of both products, Great Britain being the principal source of our foreign supply. Our exports of iron and steel are only nominal.

A simple enumeration of some of the more important uses to which iron and steel are applied by our people will show how prominent is the part these metals play in the development of American civilization and in the advancement of our greatness and power as a nation. . . .

In reviewing the historical pages of this report the most striking fact that presents itself for consideration is the great stride made by the world's iron and steel industries in the last hundred years. . . . A hundred years ago there were no railroads in the world for the transportation of freight and passengers. Iron ships were unknown, and all the iron bridges in the world could be counted on the fingers of

one hand. Without railroads and their cars and locomotives, and without iron ships and iron bridges, the world needed but little iron. Steel was still less a necessity, and such small quantities of it as were made were mainly used in the manufacture of tools with cutting edges.

The great progress made by the world's iron and steel industries in the last hundred years is as marked in the improvement of the processes of manufacture as in the increased demand for iron and steel products. . . .

The next most important fact that is presented in the historical chapters of this report is the astonishing progress which the iron and steel industries of the United States have made within the last twenty years. During this period we have not only utilized all contemporaneous improvements in the manufacture of iron and steel, but we have shown a special aptitude, or genius, for the use of such improvements as render possible the production of iron and steel in large quantities. . . . If our iron and steel industries had not been developed in the past twenty years as they have been it is clear that our railroad system could not have been so wonderfully extended and strengthened, and without this extension of our railroads we could not have produced our large annual surplus of agricultural products for exportation, nor could our population have been so largely increased by immigration as it has been. . . .

The position of the United States among iron and steel producing countries in 1880 is correctly indicated in the following table of the world's production of pig iron and steel of all kinds, which we have compiled from the latest and most reliable statistics that are accessible. This table places the world's production of pig iron in 1880 at 17,688,596 gross tons, and the world's production of steel in the same year at 4,343,719 gross tons. The percentage of pig iron produced by the United States was nearly 22, and its percentage of steel was nearly 29, being surpassed in the production of each only by Great Britain.

I. *The Iron and Steel Industry, 1870–1900*[1]

The growth of this important industry is shown in the following table. The decline in the number of establishments should be noted in connection with the increase in capital, labor, and output.

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[1] *Twelfth Census of the United States.* Census Bulletin 246 (Washington, 1902), 6.

IRON AND STEEL: COMPARATIVE SUMMARY, 1870 TO 1900, WITH PER CENT OF INCREASE FOR EACH DECADE[1]

	DATE OF CENSUS				PER CENT OF INCREASE		
	1900	1890	1880[2]	1870[2]	1890 to 1900	1880 to 1890	1870 to 1880
Number of establishments	669	719	792	808	[3]7.0	[3]9.2	[3]2.0
Capital	[4] $590,530,484	[4] $414,044,844	$209,904,965	$121,772,074	42.6	97.3	72.4
Wage-earners, average number	222,607	171,181	[6] 140,798	77,555	30.0	21.6	81.5
Total wages	$120,836,338	$89,273,956	[6] $55,451,510	$40,514,981	35.4	61.0	36.9
Men, 16 years and over	219,635	168,943	133,023	75,037	30.0	27.0	77.3
Wages	$120,157,007	$88,840,642	[5]	[5]	35.3	.....	.....
Miscellaneous expenses	$32,274,100	$18,214,948	[7]	[7]	77.2	.....	.....
Cost of materials used	$522,431,701	$327,272,845	$191,271,150	$135,526,132	59.6	71.1	41.1
Value of products[8]	$804,034,918	$478,687,519	$296,557,685	$207,208,696	68.0	61.4	43.1
Tons of products[9]	29,507,860	16,264,478	6,486,733	3,263,585	81.4	150.7	98.8

[1] This summary includes only active establishments for 1880, 1890, and 1900; such establishments were not reported separately in 1870. The 669 establishments in 1900 include 1 penal institution, the figures for which are not included in Parts I and II of the Report on Manufactures. . .

[2] For explanation of the apparent discrepancies in the data for 1870 and 1880, see remarks, page 2, Part I, Manufacturing Industries, 1890, in regard to the depreciated currency of 1870; and in regard to the inclusion of capital, employees and wages relating to mining and other operations in the figures for 1880, see page 745, Statistics of Manufactures, 1880.

[3] Decrease. [4] Includes rented property valued in 1900 at $16,968,821; in 1890 at $8,273,058. [5] Not reported separately.

[6] Does not include 180 employees and $25,275 wages reported by an idle establishment in Minnesota, and included in the totals published at the census of 1880. These employees were engaged in making repairs to plant.

[7] Not reported. [8] Includes value of miscellaneous products for which tonnage was not reported. [9] Gross ton of 2,240 pounds.

II. Tariff

A. *Tariff Changes, 1860–1882* [1]

Even before the outbreak of the Civil War the financial necessities of the government led to an increase in tariff rates, and during the war itself they were raised to prohibitory heights. When the cessation of hostilities led to a reduction of expenditures, Congress preferred to remove the more onerous internal revenue taxes and leave the tariff almost undisturbed. A ten per cent reduction in 1872 lasted only one year, so that in 1882 the tariff was still practically on the war level. Roberts was an ardent protectionist.

The bill which has become well known as the Morrill tariff, and which, with increments and changes, has stood for over twenty years, was introduced by Hon. Justin S. Morrill, of Vermont, on the 12th of March, 1860, and passed the House of Representatives in May of that year. . . .

A general increase was made in rates, and many duties were changed to specific sums from rates varying with value. . . .

Seven states had proclaimed ordinances of secession before this act was passed, and the demands of the national government at once began to increase with a rapidity calculated to paralyze weak minds. The special session of Congress, which assembled on the fourth of July, 1861, had no more important task than to provide money for the national treasury. Mr. Stevens, from the Committee on Ways and Means, however, announced that no general revision of the tariff would be undertaken. By an act which bears date August 5, 1861, the rates were advanced, and tea and coffee, with some other commodities, were subjected to duty. The like process of general increase was carried still farther by the act of December 24, 1861. The aim was the same in the statute of July 14, 1862. By joint resolution of April 29, 1864, all duties, except upon white paper, were increased fifty per cent. for sixty days. On the 30th of June, 1864, a permanent increase was provided for. Mr. Morrill in explaining the bill declared that its primary object was to increase the revenue, and at the same time to shelter and nurse our domestic products, from which at that time we were drawing much the largest receipts into the treasury. March 3, 1865, another bill was passed to adjust the duties on imports to the internal taxes which had been augmented. On the 28th of July, a law of four pages was found to be necessary for correc-

[1] *Government Revenue: especially the American System.* By Ellis H. Roberts (Boston, 1884), 115–8.

tions and adjustment of imposts. March 2, 1867, the imposts on wool were increased.

At this point the war revenues culminated. The process of decided reduction was begun by the act of July 14, 1870. Under that statute the rates on teas, which had been twenty-five cents a pound, were made fifteen cents; coffee, which had been five cents, was made three cents; pig-iron, which had been rated at $9 a ton, was carried down to $7. Spices were generally reduced. Other imposts were changed in a like spirit. The estimated decrease in duties was $29,000,000 a year, from the operation of this law. Tea and coffee were placed on the free list May 1, 1872. On the first of June, 1872, another act was passed still further cutting down the war imposts. It was reported by Mr. Dawes, of Massachusetts, and one of its provisions was to strike off ten per cent from the rates collected on most of the commodities, and to put others into the free list. The effect of the acts of May and June, 1872, was estimated to be the reduction of the receipts from customs to the extent of $44,374,721 a year.

The business reaction which produced the panic of 1873, and the consequent falling off in government receipts, in addition to the estimated results of legislation, led to the restoration of this ten per cent., March 3, 1873. No important changes in duties occurred until the appointment of the tariff commission, May 15, 1882, and its report leading to the act of March 3, 1883. . . .

B. *Reduction of the Tariff Urged, 1882*[1]

The first tariff commission in the United States was appointed in 1882. Though the protected interests were strongly represented on it, the commission brought in a report urging a radical reduction from the existing high duties. Congress, however, paid little attention to their report in framing the Tariff Act of 1883, and made but slight reductions and those mainly in the non-protected groups.

. . . Early in its deliberations the Commission became convinced that a substantial reduction of tariff duties is demanded, not by a mere indiscriminate popular clamor, but by the best conservative opinion of the country, including that which has in former times been most strenuous for the preservation of our national industrial defenses. . . .

Entertaining these views, the Commission has sought to present a scheme of tariff duties in which substantial reduction should be the distinguishing feature. The average reduction in rates, including

[1] *Report of the Tariff Commission.* (Washington, 1882), I, 5, 6.

that from the enlargement of the free list and the abolition of the duties on charges and commissions, at which the Commission has aimed is not less on the average than 20 per cent., and it is the opinion of the Commission that the reduction will reach 25 per cent.

C. *Changes in the Tariff, 1883–1897* [1]

By 1883 the manufacturing interests were strong enough to resist any effort to reduce the protection granted in the tariff, and the act of 1883 made an average reduction of only about 5 per cent, though the extract here quoted, from a Republican report, gives a different impression. A few years later these duties yielded sums far in excess of the needs of government, and the Democrats proposed to lower the tariff and thus reduce the revenue. The Mills Bill was not enacted into law, however, and two years later the Republicans, who were now in control, passed the McKinley Act, which aimed to reduce the revenue by raising duties to an almost prohibitory point. This was reversed four years later by the Wilson Act, which was passed by a Democratic Congress and essentially reduced duties, putting many articles on the free list. The panic of 1893 and resulting depression made the revenue from this act insufficient, and in 1897 the Dingley Act advanced duties even beyond the point they had reached under the act of 1890, or to an average rate of 57 per cent, the highest in the history of the tariff.

The Aldrich Report, 1888

Mr. Aldrich, from the Committee on Finance, submitted the following report: . . .

The criticism of our tariff laws which is urged with most pertinacity is based upon the assumption that we are maintaining in time of profound peace a war tariff enacted to provide for the enormous expenditures incurred between 1861 and 1866. It is frequently claimed that the rates which are now imposed are greater even than those which were levied during the war. . . .

The revision of March 3, 1883, left the rates upon nearly all articles mentioned in our tariff schedules greatly below those which had been levied prior to July 14, 1870. For instance, the rate on every item in the woolen schedule had been largely reduced. This is also true of every item in the cotton schedule except manufactures of cotton not otherwise provided for. All manufactures of iron and steel, with a few unimportant exceptions, had been changed. All but two of the rates in the earthenware schedule had been amended. The duties upon common window glass had been largely reduced. The chemical schedule had been entirely recast, and great reductions

[1] *Customs Tariff: Senate and House Reports, 1888, 1890, 1894, 1897.* 60th Cong., 2d sess., Sen. Doc. No. 547 (Washington, 1909), 78–80, 15–6, 242–3, 282–91, 347–53, *passim.*

in rates had taken place. The list of the articles which remain dutiable at rates which were imposed in 1870 includes the agricultural products, a few manufactured articles of minor importance with rates from 20 to 35 per cent, several fancy articles, like perfumery, cosmetics, and artificial flowers, upon which a revenue duty of 50 per cent was laid, and the articles enumerated in the flax, hemp, and jute schedule, upon which the duties have never been protective. As to all the great protected industries, changes in phraseology and radical reductions in rates had been made. . . .

The Mills Report, 1888

To Reduce Taxation and Simplify the Laws in Relation to the Collection of the Revenue

The Committee on Ways and Means, to whom was referred the annual message of the President, calling the attention of Congress to the large surplus now in the Treasury, daily growing larger on account of the excess of receipts over expenditures, have given to the subject that careful consideration which its importance demands, and in response to his recommendations beg leave to report to the House a bill to prevent the accumulation of surplus revenue by reducing the present excessive and unjust rates of taxation imposed upon the people.

Our revenues for the fiscal year ending June 30, 1887, amounted to $371,403,277.66, while our expenditures for the same time, including interest and sinking fund for the public debt, amounted to $315,835,428.12; leaving a surplus of $55,567,849.54 over and above all requirements for current expenditure. . . .

There are two ways in which this excessive accumulation may be prevented. We may reduce taxation to the level of expenditures and leave in the pockets of the people all moneys not needed for public purposes, or we may raise expenditures to the height of taxation, seeking out new and useless objects of appropriation on which to lavish the great and growing revenues, not needed for any legitimate wants of the public service.

If we adopt the latter course these very objects of useless expenditure will gather upon Congress in such increasing numbers and with such growing demands as to fasten upon the Government a permanent and unchangeable policy of extravagant and reckless appropriations. . . .

There is but one safe course, and that is to reduce taxation to the

necessary requirements of an honest, economical, and efficient administration of Government. Having determined upon this course as the one which a wise and just policy demands, we are confronted with the question, Upon what articles shall the reduction be made? Shall we leave our import duties as they are and repeal the internal-revenue taxes on alcoholic liquors and tobacco? Or shall we leave the internal-revenue tax as it is and make the reduction on imports alone? Or shall we reduce the taxes on both?

The committee have determined to recommend a reduction of the revenues from both customs and internal taxes. They have given the whole subject a careful and painstaking examination, and in the revision of the schedules have endeavored to act with a spirit of fairness to all interests. They have carefully kept in view at all times the interests of the manufacturer, the laborer, the producer, and the consumer. . . .

McKinley Report, 1890

To Reduce the Revenue and Equalize Duties on Imports, and for Other Purposes

Mr. McKinley, from the Committee on Ways and Means, submitted the following report (to accompany H. R. 9416):

The Committee on Ways and Means, to whom was referred that part of the message of the President of the United States relating to public revenues, have carefully considered the subject, and report back the accompanying bill with a favorable recommendation.

We are advised from the annual report of the Secretary of the Treasury that the ordinary revenues of the Government, actual and estimated, for the fiscal year ending June 30, 1890, will be $385,000,000, and that the expenditures for the same period, actual and estimated, will be $293,000,000, leaving a surplus of $92,000,000. . . .

The exact effect upon the revenues of the Government of the proposed bill is difficult of ascertainment. That there will be a substantial reduction, as we shall show, admits of no doubt. It is not believed that the increase of duties upon wools and woolen goods, and upon glassware, will have the effect of increasing the revenues. That would, of course, follow if the importations of the last fiscal year were hereafter to be maintained, which, however, is altogether improbable. The result will be that importations will be decreased, and therefore the amount of revenue collected from these sources will be diminished.

In every case of increased duty except that imposed upon tin plate (which does not go into effect until July 1, 1891) and upon linen fabrics the effect will be to reduce rather than enlarge the revenues, because importations will fall off. It was the aim of the committee to fix the duties upon that class of manufactured goods and farm products which can be supplied at home so as to discourage the use of like foreign goods and products, and secure to our own people and our own producers the home market, believing that competition among ourselves will secure reasonable prices to consumers in the future as it has invariably done in the past. . . .

We have not been so much concerned about the prices of the articles we consume as we have been to encourage a system of home production which shall give fair remuneration to domestic producers and fair wages to American workmen, and by increased production and home competition insure fair prices to consumers. . . .

Wilson Report, 1893

To Reduce Taxation, to Provide Revenue for the Government, and for Other Purposes

Mr. Wilson, of West Virginia, from the Committee on Ways and Means, submitted the following report to accompany H. R. 4864:

The Committee on Ways and Means, to which have been referred sundry House bills imposing or regulating custom duties upon articles imported into the United States from other countries, have prepared and herewith present a bill which contemplates a general revision, reduction, and simplification of our system of import duties, and submit it with the following explanatory statement:

The American people, after the fullest and most thorough debate ever given by any people to their fiscal policy, have deliberately and rightly decided that the existing tariff is wrong in principle and grievously unjust in operation. They have decided as free men must always decide, that the power of taxation has no lawful or constitutional exercise except for providing revenue for the support of Government. . . .

The average rate of duties levied under the existing law upon the dutiable goods imported in 1892 was 48.71 per cent. Had the duties proposed in the present bill been levied upon that year's importation of dutiable goods, the average rate on them, including those we transfer to the free list, would have been 30.31 per cent. As so many of the rates of the present law are really prohibitory, it is

impossible to say what its real rate of taxation is, but it is safe to affirm that it is much higher than any import tables will disclose. . . .

Dingley Report, 1897

Proposed Revision of Tariff — Revenue and Protection

Mr. Dingley, from the Committee on Ways and Means, submitted the following report (to accompany H. R. 379):

The Committee on Ways and Means, to which was referred the President's message convening Congress in extraordinary session for the purpose of raising additional revenue required to meet the national expenses, and also the bill (H. R. 379) entitled "A bill to provide revenue for the support of the Government and to encourage the industries of the United States," beg leave to submit the following report:

For nearly four years the revenue has been inadequate to meet the current expenditures and pay the interest on the war debt. The deficiency during this period has been as follows:

Fiscal year ended June 30 —	
1894	$69,803,260
1895	43,805,223
1896	25,203,246
1897 (estimated)	65,000,000
Total deficiency	203,811,729

The revenue derived from duties on imports, and also from internal-revenue taxes, for each fiscal year beginning with 1892 was as follows:

Year	From customs	From internal revenue
1892	$177,452,964	$153,971,073
1893	203,355,016	161,027,624
1894	131,818,530	147,111,233
1895	152,158,617	143,421,672
1896	160,021,751	146,762,864
1897 (estimated)	140,000,000	150,000,000

The plain duty, therefore, of Congress — a duty emphasized by the President's message laid before the House on the opening day of this extraordinary session — is to so revise the tariff as to secure

an increase of revenue from duties on imports substantially equal to what has been lost, first, by the anticipated, and then by the partially realized, tariff reductions made by the act of 1894. . . .

Another imperative duty resting on this Congress is to so adjust duties in such a revision of the tariff to secure needed revenue to carry on the Government as will better protect the many industries which have so seriously suffered the past three years from unequal foreign competition, and from the consequent loss of purchasing power of the masses of the people, upon which the demand for products and the prosperity of every citizen depends. . . .

The reciprocity policy inaugurated in the tariff of 1890, which proved so great a success in the brief period of its existence, is not only restored, but enlarged. The provisions of the act of 1890, authorizing the President to impose duties on coffee, tea, skins, and hides, in case the countries exporting such articles decline to extend equivalent concessions to exports from the United States, are reenacted, sugar being transferred to the schedule of articles on which duties are imposed. . . .

D. *Tariff Act of 1909*[1]

Changing economic conditions, especially the growth of industrial combinations and the rise in prices, led to a demand that the tariff be revised. In 1909, accordingly, the Payne-Aldrich tariff was passed by a Republican administration. The following extract is taken from a speech in defense of this act by the Hon. Charles H. Morgan of Missouri, in the House of Representatives, May 27, 1910. Here the claim is made that the tariff schedules were in every case adjusted to differences in the cost of production between the United States and foreign countries. In spite of the large claims put forth, the results of the act were disappointing, for the changes downward were slight and unimportant, while the monopolized industries retained their former high rates.

The greatest work of this Congress, and one that reflects the greatest credit upon the administration and will be its chief glory in the years to come, is the enactment of the Payne law. . . . With the Republican Members of the Committee on Ways and Means the question was not whether the rates of duty as provided by the Dingley law should be increased or reduced, but what was the cost of production at home and abroad. In other words, the question with them was one of protection to American labor, and it can be asserted truthfully that in no case was the duty increased beyond the necessary rate for protection, nor was it knowingly reduced below that point.

[1] *Congressional Record*. 61st Cong., 2d sess. Vol. 45, Part IX, Appendix (Washington, 1910), 285–6.

The question has been raised whether the Payne law as a whole was an increase of rates or a reduction of rates upon the Dingley law. A comparison of the two laws will show that there was a reduction upon articles of common use throughout the country, without going below a protective duty, while for the purposes of revenue there was an increase upon articles of luxury. In a speech made in this Chamber on May 12 by the distinguished chairman of the Committee on Ways and Means, Hon. SERENO E. PAYNE, of New York, whose fairness and ability no one questions, a list of reductions was given which I hope may be read by every voter in the country. Among the articles upon which the tariff was reduced are agricultural implements, wagons, mowers, binders, harrows, rakes, plows, cultivators, and thrashers. Upon these articles the reduction was 25 per cent. . . .

As shown by Mr. PAYNE and Mr. FORDNEY, under the Payne law there has been a decrease in the tariff on goods imported into this country valued at about $5,000,000,000, while there has been an increase in the tariff on goods imported valued at $241,000,000. Let us see upon what character of goods these increases have been made. First, liquors, alcoholic compounds, automobiles, spirits, wines (including champagne and imported liquors), embossed paper and ornamental things, and upon zinc ore and diamonds.

There has been much said here and throughout the country as to whether this revision has been up or down, and whether we have kept the pledges of our party, made at Chicago. The mere reading of the national Republican platform of 1908 will settle in the minds of the most skeptical this question. . . .

Not one word as to a revision upward or downward, but a plain, unequivocal declaration in favor of protection, by a duty to make up the difference between cost abroad and at home. If the duty under the Dingley law was found too low to make up this difference, it was raised; if at the point, it was left alone; if found above the point of protection, it was unhesitatingly lowered; and the law as it now stands is a real compliance with the party policy and the party pledges. Can any honest person, reading our platform and comparing the Payne law with the Dingley law, contend for a moment that we have not carried out our party pledges? We have kept steadfastly in view the interests of our people and have placed a duty on the articles imported from foreign countries, the rate being no greater and no less than sufficient to meet the competition of cheap foreign labor and at the same time maintain the higher wages paid in this country in the mines, the factories, the mills, and on the farms.

E. *Tariff Act of 1913*[1]

In spite of protectionist defense of the tariff of 1909 there was strong popular dissatisfaction with this measure, and largely as a result of this feeling the Democrats were returned to power at the next election, pledged to revise the tariff downward. Accordingly they passed the Underwood tariff of 1913, which materially reduced duties and enlarged the free list. In doing this a considerable sacrifice of revenue was made, which they aimed to make good by the passage of the income tax law in the same year.

UNDERWOOD REPORT, 1913

To Reduce Tariff Duties, to Provide Revenue for the Government, and for other Purposes

MR. UNDERWOOD, from the Committee on Ways and Means, submitted the following report.

The Committee on Ways and Means, to whom was referred House bill H. R. 3321, having had the same under consideration, report it back to the House without amendment and recommend that the bill do pass. . . .

The tariff situation resulting from 50 years of high protective rates, had gradually become intolerable; and five years ago the dissatisfaction with prevailing duties expressed itself in so unmistakable a manner as to lead to a revision of rates. Twelve years of experience since the revision in 1897 had shown many points at which bad or erroneous work had been done during the hasty process of framing and passing the Dingley Act. Conditions of production and of business organization had greatly changed, so that the old rates upon many commodities, even if at first defensible, had become obsolete. A very great and increasing dissatisfaction on the part of the consuming masses, due to an advance in prices and in the cost of living, constituted the important factors in the situation. Tariff revision in 1909 was therefore politically unavoidable, and the country had reason to demand of the party then in authority a modification of the extreme policy which had for many years been creating and aggravating tariff abuses.

The expectation of redress was blasted by the tariff act of 1909. This measure, if anything, made worse the conditions which had given rise to its passage. It brought no real reduction in the level of rates of duty prevailing, and for some commodities resulted in

[1] *Report of the Committee of Ways and Means.* 63d Cong., 1st sess., House Report No. 5 (Washington, 1913), i–xvii, *passim.*

advances, due largely to reclassifications which concealed the real rates. . . .

Again commanded by the electorate in the autumn of 1912 to renew the effort at tariff revision, and encouraged by a sweeping victory at the polls, which placed every branch of the Government in the control of the Democratic Party, the Ways and Means Committee, after due deliberation, have completed a measure, . . . intended to revise the whole of the existing system of tariff rates. . . .

Certain distinct economic developments between the years of 1897 and 1913 must be studied in close connection with the working of the tariff law. . . .

Probably the most striking economic change since 1897 has been the tremendous increase in the cost of living — a situation which has attracted the anxious attention of economists the world over. The following figures represent the relative advance in living costs that has taken place during the critical part of the period in question in the United States:

TABLE 1.— *Relative wholesale prices, and per cent of increase over 1897*

Commodity	Price, 1897	Price, 1900	Increase over 1897	Price, 1910	Increase over 1897
			Per cent.		Per cent.
Farm products	85.2	109.5	28.5	164.6	93.2
Food	87.7	104.2	18.8	128.7	46.7
Clothing	91.1	106.8	17.2	123.7	35.8
Metals and implements	86.6	120.5	39.1	128.5	48.2
Drugs and chemicals	94.4	115.7	22.5	117.0	23.9
House furnishing goods	89.8	106.1	18.1	111.6	24.2
Miscellaneous	92.1	109.8	19.2	133.1	44.5
All commodities	89.7	110.5	23.1	131.6	46.7

In close conjunction with the advance in cost of living and with the practical reservation of the field of domestic production to the manufacturers in the more important lines, should be considered the development of industrial combinations or trusts which has been so active during recent years. . . .

The rapid growth in population and the failure of domestic resources to meet the demand for an increased supply of agricultural products, and in some respects for manufactured goods, have been most noteworthy during the years under consideration. That the speedy exhaustion of many natural resources is to be feared unless

access to a fresh supply is gained, no one who considers the subject from an unbiased standpoint can doubt. This is notably true in the case of such articles as timber, ores, minerals, and other substances whose supply can not be increased and whose exhaustion is merely a question of the rate at which they are taken from their original sources. That the protective system has been greatly influential in maintaining a too rapid rate of depletion of natural resources in order to satisfy the constantly increasing demands of a rising population is an unmistakable fact. . . .

There is another serious condition which must be directly attributed to the tariff, but of which little is usually said. This is the existence of obsolete plants and methods in many lines of industry, old machinery and out-of-date methods being continued in operation for years after they have been practically eliminated elsewhere. . . . The information in the hands of the Ways and Means Committee strongly confirms the belief that there is rarely a highly protected industry in which a considerable percentage of the plants and machinery are not hopelessly behind the times. The demand for high protective duties is necessarily based upon the supposed requirements of these plants, for in nearly every line of business the modern and most efficient establishments are able to hold their own against any foreign competition. These conditions constitute one of the strongest arguments in favor of rectifying the conditions complained of by applying the impetus of moderate competition. . . .

In its tariff-revision work the committee has kept in mind the distinction between the necessaries and the luxuries of life, reducing the tariff burdens on the former to the lowest possible point commensurate with revenue requirements and making the luxuries of life bear their proper portion of the tariff responsibilities. . . .

The committee has had these facts in mind in the preparation of H. R. 3321 and the attempt has been made —

1. To eliminate protection of profits and to cut off the duties which enable industrial managers to exact a bonus for which no equivalent is rendered.

2. To introduce in every line of industry a competitive tariff basis providing for a substantial amount of importation, to the end that no concern shall be able to feel that it has a monopoly of the home market gained other than through the fact that it is able to furnish better goods at lower prices than others.

It is felt that tariff schedules aiming at these two conditions can damage no legitimate industry and is the least that can be asked by

those who desire the consumer to be safeguarded in some measure against exploitation by monopolies that now practically dictate prices in the domestic field. . . .

III. Trusts

A. *The Tendency to Consolidation, 1901* [1]

The movement towards large-scale production had been going on fairly steadily for half a century, but in the eighties a new tendency showed itself — the consolidation of hitherto competing establishments into one large concern. This movement was especially rapid after 1898, and to its consideration the Industrial Commission devoted four volumes of its report.

The tendency to consolidate competing establishments in various industries has been so pronounced in recent years as to create much apprehension of monopoly. . . . The economic advantages of combination, and the apparent success of most of the new companies, have led many of the ablest business men and economists to the conclusion that the combinations have become an established factor in the industrial life of the nation. Not all of the problems, however, have been worked out, and it remains to be seen whether or not the new companies are as safe for investment as the old, and whether or not the public interest is in any way endangered by them. . . .

Until after the close of the civil war business in the United States was so much localized, on account of the lack of facilities for transportation and the relative smallness of the capital invested, that no large combinations were made.

The rapid development of business in the years following the war, together with the artificial stimulus given to certain lines of industry, either by internal-revenue legislation, as in the case of manufacture of spirits, or by the special demand created by the war itself and by the reaction following it, led to several combinations of a wider reach.

These pools in various lines of business, including agreements upon output and prices, were found to be in each case only temporarily effective. Whenever prices were remunerative, each competing manufacturer naturally found it desirable to extend his sales, and the agreement was likely to be broken.

The application by the courts of the common law regarding restraint of trade also tended to weaken these pools. Under the com-

[1] *Final Report of the Industrial Commission.* (Washington, 1902), XIX, 595–600, *passim.*

mon law, both in England and in this country, contracts in restraint of trade have been held invalid. It is true that, when the limitation has covered only certain sections of the country or short times, contracts in partial restraint of trade, if considered reasonable, have been regularly upheld by the courts.

For short periods these pools and other forms of price and selling agreements were very common. . . .

The managers of the Standard Oil Company of Ohio and of other companies associated with it, found that pools and ordinary forms of agreement regarding prices and output did not give sufficient power over the various members, either to control the market or to secure the most efficient methods of production. In consequence this company first devised and put into effect the so-called trust agreement, by which numerous individuals, firms, and corporations, formerly competitors, were brought together in 1882 into the one Standard Oil Trust. . . .

This success in harmonizing divergent interests in the oil-refining industry led to smilar arrangements in other industries. The Distillers' and Cattle Feeders' Company (the so-called Whisky Trust), the Sugar Refineries Company (the Sugar Trust), and other similar organizations with large capital and influence, were soon established. . . . Hostile decisions of the courts, together with this new legislation, forced the trusts to change their form. The Standard Oil Trust was dissolved in 1892. . . .

In these three instances, and in others, the trust organization thus became a combination of a different type. In the case of the Standard Oil Company a mere harmony of interests united separate corporations. In the case of the others named, a new corporation had acquired all the properties. This latter form of organization, after the declared illegality of the trusts, became the most common whenever it seemed advisable to organize the chief competitors in any industry under a single management.

The tendency of business toward consolidation, with the fact that the corporation form seemed to be the one recognized by the courts as alone feasible, influenced some States, desirous of attracting capital, to make corporation laws favorable to combinations desiring to do business in different sections of the country. New Jersey particularly, but also Delaware, West Virginia, and others, enacted such laws. These laws were especially liberal in permitting corporations to carry on their business, to hold directors' meetings, and in some cases even stockholders' meetings, outside of the boundaries of the

incorporating State. Very little inspection was provided for or exercised. The chartered tax and annual franchise tax were made light.

These laws, so favorable to corporations, together with the pressure of competition and with the advantages of combination, led to a very rapid increase in such industrial combinations.

The movement toward combination began among the railroads earlier than in industrial lines, and has continued to the present time. . . .

The rapid growth of capital, with the advantages for its use which were shown to follow combination, has accelerated consolidation in recent years. When goods were in general demand over wide sections of the country, when these goods were of a certain standard uniform quality, and when the goods were bulky, so that the freight charges formed an essential part of the cost, it was found that a combination in the production of such goods might readily secure so great an advantage over its smaller rivals that the tendency toward monopoly became strong. Combinations in the oil, sugar, salt, and similar industries were organized early, and they became powerful. When large establishments were necessary in order to produce at the lowest cost, a combination had a decided advantage over an individual competitor of small financial strength. Experience further showed then when expensive advertising was necessary to popularize special brands or trade-marks, combinations had an advantage over smaller concerns.

These three influences — a standard product, very large capital, and popular trade-marks — seem to have been particularly powerful in bringing about the most successful combinations. On the other hand, whenever it it necessary for the producer to cater to the taste of the individual consumer, it is much more difficult to form efficient combinations. It is true that in some cases the combination may buy up individual talent or genius, and in that way secure some control; these, however, are exceptional, and the combination can never expect to secure entire control of special talent.

There is reason to believe that the movement toward concentration of industry will go steadily on, but there is no reason for thinking that within measurable time the combinations will cover the entire field of industry. There will still be left abundant opportunity for individual ownership and management.

B. *The Causes of Consolidation, 1901* [1]

The causes that led to the formation of the steel trust are here briefly given. These are probably typical of the forces that led to the movement in other fields.

In 1890 there were scarcely any consolidations of the modern type in the steel industry. With only a few exceptions there were no concerns with a capitalization exceeding or even approaching $20,000,000. During the middle nineties there was a gradual change toward larger units, both by expansion and by combination; but the depressed conditions of that period were unfavorable to the organization of great corporations, and as late as 1898 the steel industry was characterized by the competition of a large number of independent concerns. The year 1898, however, witnessed a marked advance toward consolidation. This movement progressed with great rapidity in the next few years, until by the middle of 1901 substantially three-fifths of the steel industry of the country was concentrated under a single organization — the United States Steel Corporation — with an issued capitalization, including bonded indebtedness, of over $1,400,000,000. . . .

While the failure of the various pools in the iron and steel trade to establish permanently effective control over the production and prices of iron and steel products was undoubtedly an important cause of outright consolidation as a surer method of restricting or eliminating competition, consolidation was not, however, resorted to for this purpose alone. The underlying causes of consolidation in the steel industry, which were substantially the same as those operating in other great industries, may be defined as follows:

1. The restriction of competition.

2. Integration; that is, the linking-up of productive processes through the acquisition, under one control, of raw materials and manufacturing plants (and in some cases transportation facilities), and through extensions and coordination of manufacturing processes.

3. The creation of a great amount of inflated securities.

The first of these causes, namely, the restriction or elimination of competition, was undoubtedly the most potent. Indeed, the organizers of some of these great consolidations have admitted that a desire to control or eliminate competition was the chief reason for their formation. This was undoubtedly true of many consolidations in the steel industry. . . .

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[1] *Report of the Commissioner of Corporations on the Steel Industry.* (Washington, 1911), I, 63, 82–4.

It is worth pointing out that the technical economies of integration were chiefly connected with combining and coordinating the successive stages of manufacture, which resulted in the saving of fuel for reheating the metal, of labor and time in the moving or handling of material, and in the utilization of by-products, such as blast-furnace gas.

As distinct from economies thus brought about through such enlargement and coordination of plants, consolidation afforded a means for saving the payment of profits to others on the purchase of materials. . . .

The third cause above enumerated, namely, the opportunity to obtain profits from flotation of new securities, was undoubtedly a very important influence in the consolidation movement. Indeed, the proportions of this movement were largely determined by the opportunity to market the securities thus created. So long as the demand for such issues was maintained the supply was steadily increased. . . .

C. *Alleged Advantages of Combination, 1897* [1]

A rather hostile report was made by a committee of the New York state legislature on the subject of trusts from which a short extract on the alleged advantages is given.

Let us consider some of the chief advantages that are claimed to exist in favor of these combinations so far as they affect the public.

The main advantage is stated to be that of economy in production reflected in lower prices to the consumer. The fact that large economies must of necessity accrue, admits of no denial. But are these followed by lower prices to the consumer? We find nothing upon the record to justify any such conclusion. It is true that sugar, for example, costs less to-day than it did prior to the time when the competing companies combined. But it is equally true that the cost of the raw material has declined to a greater extent than has the price of the refined article. Hence the consumer has not received the full benefit of the decline in the raw material, while he has had no share whatever in the diminished cost of production. In other cases combination was immediately followed by an advance in the price of the product. In fact there is nothing upon the record which indicates that combination itself effected any reduction in the price to the

[1] *Report and Proceedings of the Joint Committee of the Senate and Assembly Appointed to Investigate Trusts.* (Albany, 1897), 15–18.

consumer, or that the latter was considered with reference to any share in the profit, all elements of economy being credited rather to the upbuilding of the earning capacity of the capital stock.

The record does show, on the other hand, that a combination controlling 80 per cent. of a staple product, hence a purchaser of 80 per cent. of the raw material, could and did exert substantial influence on the price of raw material, and could, by dint of that influence, force down the price of raw material to a point which enabled it to appear as having decreased the price of the finished product to the consumer. We point to this as a noteworthy incident indicating the power of a combination thus organized, and illustrating the influence of all similar aggregations on the price of raw material wherever the effect of combined resources can not, from the nature of conditions, be offset by similar combinations between widely distributed producers.

Another advantage which is said to flow from combination, is that of a more perfect product. There is nothing upon the record to justify this conclusion. While it may be that the normal tendency of business is to secure the largest market, and with that end in view to give the greatest satisfaction to the buyer, it is quite clear that substantially undisputed control of both product and market enables a combination to economize in quality without fear of pernicious results.

Another advantage is alleged to be that of better wages and more constant employment of labor. We are equally unable to reach this conclusion. No part of the profit arising from admitted economies, and resulting in large dividends on inflated stocks, has reached labor in the form of increased wages, while the claim of constancy of employment is negatived by the fact that factories in operation for a generation have been closed, and that workingmen, more or less continually employed for years in a factory independently operated, have been discharged upon its absorption by the combination. Combinations owning factories located in different States are thereby enabled to and do at will, here and there, close factories permanently or for long periods of time; possessing factories of a capacity sufficient to supply all demands, with a surplus of 40 per cent., they may at any time cause factories in many localities to remain temporarily or permanently idle and thus reduce the worker to a condition of absolute uncertainty.

Still another alleged advantage is that of stability of price to the consumer. This must be admitted. But the question is whether the fixing of a stable price operates to his advantage. It is an abnormal and not a natural condition — a price fixed at the maximum

that the consumer will pay consistent with the marketing of the largest volume of product practicable. The fixing of the price, whereby the producer is able to retain all the benefits of economy and concentration for himself, is not that kind of stability in values which appeals with special force to the consuming public. The kind of stability which revolutionizes the law of supply and demand and enables the combination to hold its products at a fixed price without regard to the tendency of prices and through times of depression such as have been experienced for the past four years, when commodities generally have fallen ratably in the markets, to maintain prices fixed by its arbitrary decision, produces an inequality among the people which may scarcely be described as an advantage except to the combination itself.

D. *Effects of Industrial Combinations upon Prices and Wages, 1900* [1]

Data on these subjects were collected by the Department of Labor and committed to Professor Jenks for analysis and discussion. The conclusions therefore bear an official sanction and may be regarded as fair and unbiased. Professor Jenks is professor of economics at New York University, and has written much on the subject of trusts.

This study of facts regarding industrial combinations embodies the results of reports made by 41 combinations. . . .

Prices Fixed by Combinations.— Probably the most important economic effect of the combinations is to be found in their influence upon prices; next, that of their influence upon wages. Before entering upon the study of the course of prices before and after the formation of certain special combinations it will be useful to note the direct efforts made by the combinations to fix prices for the consumers. Out of twenty-eight combinations answering the question as to whether the organization fixed the prices at which dealers shall sell to the consumers two only answered in the affirmative. They state that the penalty for making any variation from the price fixed was the cutting off of the supply. Twenty-four of the combinations answered the question directly in the negative and two reported that they did not sell to dealers, while thirteen made no answer. It is not unlikely that an effort more or less determined is made by these silent combinations to fix prices, although one could not make that assumption regarding them all. One combination stated that, while not attempting to fix prices, it did give an additional discount to those customers

[1] *Trusts and Industrial Combinations.* By Jeremiah W. Jenks. Bulletin of the Department of Labor. July, 1900 (Washington, 1900), 663, 707–8, 764–5, 678, 682–3.

who dealt exclusively with it, and in several cases the larger buyers receive special discounts beyond those given to the smaller ones. . . .

In order to determine what has in fact been done by the combinations, it is necessary to make a direct comparison between the prices of the raw materials and of the finished product. The profits which are to be affected depend mainly upon the difference between the two. . . .

The general result of the study of the prices in the preceding tables in the specific instances where the margin between the price of the raw material and of the finished product can be definitely ascertained, and where the writer has sufficient information regarding the processes so that the reasons for the variations in the prices can be adequately checked, seems to show that the combinations have in some cases had the power, temporarily at least, to control the market to a considerable extent, and that in most such cases they have used this power to increase the margin between the raw material and the finished product — possibly by forcing the price of the finished material up or by forcing the price of the raw material down; possibly in certain instances the power has been exerted in both ways. At any rate the margin has increased, and with this, beyond question, the profits of the manufacturers. On the other hand, several instances to which attention has been called show that apparently this power is by no means sufficient to remove the combination from the influence of competition, either actual or potential, and that in a good many instances, within a comparatively short time after the formation of the combination, the margin has again decreased until it was as small as before the formation of the combination, at times even smaller. It is to be expected usually, of course, that as time passes improvements in methods of production will lessen the cost, and that in consequence, with the same profits, the margin will decrease somewhat. If the combinations have been enabled to make the economies that their promoters ordinarily promise, this decrease in the margin would be expected, even though their profits were to increase somewhat. The fact that the power to increase the margin, temporarily at least, somewhat arbitrarily, and the fact that this margin has been increased in specific cases, seem to be clearly established. Here again, however, one needs to be warned somewhat against too radical or too general conclusions. . . .

Wages.— Next in importance to the effect of industrial combinations upon prices, if indeed not equally important, is their effect upon wages. . . .

It will be noted that among skilled laborers the increase in the numbers of different classes comes chiefly in those receiving from $35 to $40 and $45 to $50 a week, so far as the higher-priced ones are concerned. A notable increase is also shown for those receiving from $15 to $20 and $20 to $25 a week. There was, on the other hand, a tendency to lessen the number of the more poorly paid men. . . .

It would, of course, be too much to say that these results show the general effect of combinations on wages. The returns are not numerous enough. Besides that, many of the combinations were formed at the beginning of a period of general industrial prosperity, so that an increase in wages was perhaps to be expected. The tables do show, so far as the figures go, that these combinations have not decreased wages among these classes of wage earners. Like tendencies appear also in the tables regarding large private companies. . . .

CHAPTER XXII

POPULATION AND LABOR, 1860–1915

I. Population

A. *Growth of Population, 1790–1910* [1]

The growth of the population of the United States since the taking of the first census is here shown. It should be noted that while there is a steady increase in numbers the rate of increase is falling off.

Continental United States. — The population of continental United States is 91,972,266. Compared with the population of 75,994,575 in 1900, this represents an increase during the past decade of 15,977,691, or 21 per cent. The rate of increase was slightly greater than during the preceding decade, 1890–1900, when it was 20.7 per cent.

The table following shows the population of continental United States as enumerated at each census from 1790 to 1910, inclusive, together with the increase and per cent of increase during each decade, and also adjusted percentages of increase explained in the paragraphs below [see table on page 778].

B. *The Increase of Population, 1900* [2]

Some of the more important results of an analysis of the population statistics of the census of 1900 are here given. Professor Willcox is professor of statistics at Cornell University.

The main results of the discussion of increase of population in this bulletin may be stated briefly as follows: . . . .

5. Only one country, Argentina, has shown by the most recent figures a more rapid rate of growth.

6. The present rate of growth in continental United States is probably double the average rate of Europe, is nearly double that of Canada, exceeds by one-sixth that of Mexico, and by one-tenth that of Australia. . . .

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[1] *Thirteenth Census of the United States. Taken in the Year 1910.* Volume I: Population (Washington, 1913), 24.

[2] *A Discussion of Increase of Population.* By W. F. Willcox. United States Census Office, Bulletin 4 (Washington, 1903), 5–6.

CENSUS YEAR	Population of continental United States	INCREASE OVER PRECEDING CENSUS		Percentage of increase with correction for 1870 and 1880 [1]
		Number	Per cent.	
1910.....	91,972,266	15,977,691	21.0	21.0
1900.....	75,994,575	13,046,861	20.7	20.7
1890.....	62,947,714	12,791,931	25.5	24.9
1880.....	50,155,783	11,597,412	30.1	26.0
1870.....	38,558,371	7,115,050	22.6	26.6
1860.....	31,443,321	8,251,445	35.6	35.6
1850.....	23,191,876	6,122,423	35.9	35.9
1840.....	17,069,453	4,203,433	32.7	32.7
1830.....	12,866,020	3,227,567	33.5	33.5
1820.....	9,638,453	2,398,572	33.1	33.1
1810.....	7,239,881	1,931,398	36.4	36.4
1800.....	5,308,483	1,379,269	35.1	35.1
1790.....	3,929,214	.....	....	....

8. Among the 5 main divisions of continental United States the highest rate of increase is found in the Western division and the lowest in the North Central. . . .

10. In 1790 the northern and the southern groups of states had almost equal populations, but through the following hundred years — with an insignificant and probably only apparent exception in one decade — the North steadily gained, until in 1890 its population was almost double that of the South. . . .

11. In the decade of 1890 to 1900, on the contrary, for the first time in our national history the Southern states increased faster than the Northern, if allowance be made for the undercount in 1870. . . .

15. The region east of the Mississippi increased more rapidly from 1890 to 1900 than from 1880 to 1890, while that west of the Mississippi increased in the later decade not much more than half as fast as in the earlier.

[1] The evidence is clear that there was a marked deficiency in the enumeration of the population in the southern states in 1870, resulting in an understatement of the increase from 1860 to 1870 and an overstatement of the increase from 1870 to 1880. There is no means of ascertaining accurately the extent of the deficiency, but an approximate estimate of the true population in 1870 was made in the census report of 1890 (Population, Part I, pp. xi, xii, and xvi) by which the population in 1870 was placed at 39,818,449 instead of 38,558,371. Using this figure the increase of 1870 over 1860 would be 8,375,128, or 26.6 per cent, and the increase of 1880 over 1870, 10,337,334, or 26 per cent.

16. The increased growth of the East and the decreased growth of the West may both be connected with a probable decline in the current of westward migration. . . .

20. . . . The growth of population, an important index of prosperity, was more evenly distributed over the country between 1890 and 1900 than between 1880 and 1890. . . .

23. The most noteworthy result of the entire discussion is the cumulative evidence of the rapid approach to equality in the rates of increase of various parts of the United States. This appears whether North be compared with South, East with West, or city with country.

C. *The Westward Movement, 1880* [1]

The year 1880 has usually been said to have marked the passing of the American frontier. By this is meant that there was now practically continuous settlement from the Atlantic to the Pacific oceans, though it was still very sparse in the western states. The effect of the railroads in promoting western settlement is indicated in the following extract.

In tracing the history of the settlement of our country we are now brought down to the latest census, that of 1880. During the decade just past Colorado has been added to the sisterhood of states. The first point that strikes us in examining the map showing the areas of settlements at this date, as compared with previous ones, is the great extent of territory which has been brought under occupation during the past ten years. Not only has settlement spread westward over large areas in Dakota, Nebraska, Kansas, and Texas, thus moving the frontier line of the main body of settlement westward many scores of miles, but the isolated settlements of the Cordilleran region and of the Pacific coast show enormous accessions of occupied territory. . . .

The most notable change in New England and the middle states, including Ohio and Indiana, has been the increase in density of population and the migration to cities, with the consequent increase of the urban population. . . . Throughout the southern states there is to be noted, not only a general increase in the density of population and a decrease of unsettled areas, but a greater approach to uniformity of settlement throughout the whole region. . . . In Wisconsin the unsettled area is rapidly decreasing as railroads stretch their arms out over the vacant tracts. In Minnesota and in eastern Dakota the building of railroads, and the development of the latent capabilities of this region in the cultivation of wheat, have caused a rapid flow of settle-

[1] *Statistics of the Population of the United States at the Tenth Census.* (Washington, 1883), I, xix–xx.

ment, and now the frontier line of population, instead of returning to Lake Michigan, as it did ten years ago, meets the boundary line of the British possessions west of the 97th meridian. The settlements in Kansas and Nebraska have made great strides over the plains, reaching at several points the boundary of the humid region, so that their westward extension beyond this point is to be governed hereafter by the supply of water in the streams. . . . Texas also has made great strides, both in the extension of the frontier line of settlement and in the increase in the density of population, due both to the building of railroads and to the development of the cattle, sheep, and agricultural interests. The heavy population in the prairie portions of the state is explained by the railroads which now traverse them. . . .

Of all the states and territories of the Cordilleran region Colorado has made the greatest stride during the decade. From a narrow strip of settlement, extending along the immediate base of the Rocky mountains, the belt has increased so that it comprises the whole mountain region, beside a great extension upon the plains. This increase is the result of the discovery of very extensive and very rich mineral deposits about Leadville, producing a "stampede" second only to that of '49 and '50 to California. . . .

The length of the frontier line in 1880 is 3,337 miles. The area included between the frontier line, the Atlantic and the Gulf coast, and the northern boundary is 1,398,945 square miles. . . .

The population is 50,155,783, and the average density of settlement is 32 to the square mile.

D. *Growth of Cities, 1790–1880* [1]

The urban concentration of the population began on a considerable scale about the middle of the nineteenth century, and has proceeded hand in hand with the development of manufactures and of improved transportation facilities.

The growth of cities in the United States has formed a marked feature of our social and industrial history. The following table shows the number of cities of 8,000 inhabitants and over at each census, beginning in 1790, and the aggregate urban population of the country in comparison with the total population at corresponding periods:

From this table it appears that, speaking roundly, in 1790 one-thirtieth of the population of the country was found in cities; in 1800, one-twenty-fifth; in 1810, and again in 1820, one-twentieth; in 1830,

[1] *Report on the Manufactures of the United States at the Tenth Census.* (Washington, 1883), II, xxii.

Date	Population of United States	Number of cities	Population of cities	Inhabitants of cities in each 100 of total population
1790	3,929,214	6	131,472	3.3
1800	5,308,483	6	210,873	3.9
1810	7,239,881	11	356,920	4.9
1820	9,633,822	13	475,135	4.9
1830	12,866,020	26	864,509	6.7
1840	17,069,453	44	1,453,994	8.5
1850	23,191,876	85	2,897,586	12.5
1860	31,443,321	141	5,072,256	16.1
1870	38,558,371	226	8,071,875	20.9
1880	50,155,783	286	11,318,547	22.5

one-fifteenth; in 1840, one-twelfth; in 1850, one-eighth; in 1860, one-sixth; in 1870, one-fifth; and in 1880, two-ninths.

It would be difficult to say in what proportion the growth of the cities of the country, as a body, has been due to commercial, and in what proportion to industrial forces, even had we official statistics covering our internal traffic, which we have not; but I conceive that no one will hesitate to assent to the proposition that the growth of the cities of the United States since 1850 has been due in far greater measure to their development as manufacturing centers than to their increased business as centers for the distribution of commercial products. . . .

E. *Urban Concentration, 1880–1910* [1]

One of the most striking phenomena in the movement of the population during the last half century has been the increase in the urban and the relative decrease in the rural population. This has been made possible by improvements in agriculture which have set free a large part of those formerly needed on the farms and on the other hand by the growth of manufactures which have absorbed this available labor.

The Census Bureau classifies as urban population that residing in cities and other incorporated places of 2,500 inhabitants or more, including New England towns of that population. . . .

Proportion urban and rural.— The proportion of the total population living in urban and in rural territory at the censuses of 1910,

[1] *Thirteenth Census of the United States, Taken in the Year 1910.* Volume I: Population (Washington, 1913), 53, 60.

1900, 1890, and 1880, respectively, for continental United States, is shown in the following table:

CLASS	POPULATION OF CONTINENTAL UNITED STATES			
	1910	1900	1890	1880
Total	91,972,266	75,994,575	62,947,714	50,155,783
Urban	42,623,383	30,797,185	22,720,223	14,772,438
Rural	49,348,883	45,197,390	40,227,491	35,383,345
	PER CENT DISTRIBUTION			
Total	100.0	100.0	100.0	100.0
Urban	46.3	40.5	36.1	29.5
Rural	53.7	59.5	63.9	70.5

This table shows a steady and rapid increase in the proportion of urban population. While the increase in the percentage of urban population from 1900 to 1910 was appreciably greater than from 1890 to 1900, it was not so great as from 1880 to 1890. . . .

Increase in urban and rural population.— In order to compare the *rate of growth* in urban and rural communities, it is necessary in each case, as previously explained, to consider the changes in population which have occurred in the *same* territory from one decennial census to another. For this purpose communities are classed as urban or rural according to their population in 1910, and the population of the places as thus classified is then determined for 1900 for purposes of comparison.

The increase from 1900 to 1910 in urban and rural population on this basis is shown, for continental United States, in the following table:

CLASS	POPULATION IN—		INCREASE, 1900–1910	
	1910	1900	Number	Per cent.
Total population	91,972,266	75,994,575	15,977,691	21.0
Urban territory in 1910	42,623,383	31,609,645	11,013,738	34.8
Rural territory in 1910	49,348,883	44,384,930	4,963,953	11.2

The rate of increase for the population of urban areas was over three times that for the population living in rural territory.

II. Immigration

A. *Immigration, 1882–1910* [1]

The exhaustion of available free land for settlement, together with the rapid growth of the population, directed attention about 1910 to the increase in immigration of the previous decade, and especially to the changing character of the immigration. Accordingly a commission of nine persons was created to investigate and report upon the subject. They made an exhaustive report in forty-two volumes.

SOURCES OF IMMIGRATION AND CHARACTER OF IMMIGRANTS

From 1820 to June 30, 1910, 27,918,992 immigrants were admitted to the United States. Of this number 92.3 per cent came from European countries,[2] which countries are the source of about 93.7 per cent of the present immigration movement. From 1820 to 1883 more than 95 per cent of the total immigration from Europe originated in the United Kingdom, Germany, Scandinavia, the Netherlands, Belgium, France, and Switzerland. In what follows the movement from these countries will be referred to as the "old immigration." Following 1883 there was a rapid change in the ethnical character of European immigration, and in recent years more than 70 per cent of the movement has originated in southern and eastern Europe. The change geographically, however, has been somewhat greater than the change in the racial character of the immigration, this being due very largely to the number of Germans who have come from Austria-Hungary and Russia. The movement from southern and eastern Europe will be referred to as the "new immigration." In a single generation Austria-Hungary, Italy, and Russia have succeeded the United Kingdom and Germany as the chief sources of immigration. In fact, each of the three countries first named furnished more immigrants to the United States in 1907 than came in the same year from the United Kingdom, Germany, Scandinavia, France, the Netherlands, Belgium, and Switzerland combined.

The old immigration movement in recent years has rapidly declined, both numerically and relatively, and under present conditions there are no indications that it will materially increase. The new

[1] *Reports of the Immigration Commission.* (Washington, 1911), I, 23–6, 37–8, 42, 60, 139, 45–8.

[2] Including Turkey in Asia.

immigration movement is very large, and there are few, if any, indications of its natural abatement. . . .

The old immigration movement was essentially one of permanent settlers. The new immigration is very largely one of individuals a considerable proportion of whom apparently have no intention of permanently changing their residence, their only purpose in coming to America being to temporarily take advantage of the greater wages paid for industrial labor in this country. This, of course, is not true of all the new immigrants, but the practice is sufficiently common to warrant referring to it as a characteristic of them as a class. From all data that are available it appears that nearly 40 per cent of the new immigration movement returns to Europe and that about two-thirds of those who go remain there. This does not mean that all of these immigrants have acquired a competence and returned to live on it. Among the immigrants who return permanently are those who have failed, as well as those who have succeeded. Thousands of those returning have, under unusual conditions of climate, work, and food, contracted tuberculosis and other diseases; others are injured in our industries; still others are the widows and children of aliens dying here. These, with the aged and temperamentally unfit, make up a large part of the aliens who return to their former homes to remain.

The old immigration came to the United States during a period of general development and was an important factor in that development, while the new immigration has come during a period of great industrial expansion and has furnished a practically unlimited supply of labor to that expansion.

CAUSES OF THE MOVEMENT

As a class the new immigrants are largely unskilled laborers coming from countries where their highest wage is small compared with the lowest wage in the United States. Nearly 75 per cent of them are males. About 83 per cent are between the ages of 14 and 45 years, and consequently are producers rather than dependents. They bring little money into the country and send or take a considerable part of their earnings out. More than 35 per cent are illiterate, as compared with less than 3 per cent of the old immigrant class. Immigration prior to 1882 was practically unregulated, and consequently many were not self-supporting, so that the care of alien paupers in several States was a serious problem. The new immigration has for the most part been carefully regulated so far as health and likelihood of pauperism are concerned, and, although

drawn from classes low in the economic scale, the new immigrants as a rule are the strongest, the most enterprising, and the best of their class. . . .

Unlike Canada, Argentina, Brazil, Australia, and other immigrant-receiving countries, the United States makes no effort to induce immigration. A law for the encouragement of immigration by guaranteeing in this country labor contracts made abroad was enacted in 1864 but repealed in 1868. Later legislation has tended to prevent the introduction of contract laborers and assisted or induced immigration, the purpose of the Government being that the movement should be a natural one. The law respecting assisted immigration, however, does not deny the right of a person already in this country to send for an otherwise admissible relative or friend, and a large part of the present movement, especially from southern and eastern Europe, is made possible through such assistance. The immediate incentive of the great bulk of present-day immigration is the letters of persons in this country to relatives or friends at home. Comparatively few immigrants come without some reasonably definite assurance that employment awaits them, and it is probable that as a rule they know the nature of that employment and the rate of wages. A large number of immigrants are induced to come by quasi labor agents in this country, who combine the business of supplying laborers to large employers and contractors with the so-called immigrant banking business and the selling of steamship tickets.

Another important agency in promoting emigration from Europe to the United States is the many thousands of steamship-ticket agents and subagents operating in the emigrant-furnishing districts of southern and eastern Europe. Under the terms of the United States immigration law, as well as the laws of most European countries, the promotion of emigration is forbidden, but nevertheless the steamship-agent propaganda flourishes everywhere. It does not appear that the steamship lines as a rule openly direct the operations of these agents, but the existence of the propaganda is a matter of common knowledge in the emigrant-furnishing countries and, it is fair to assume, is acquiesced in, if not stimulated, by the steamship lines as well. With the steamship lines the transportation of steerage passengers is purely a commercial matter; moreover, the steerage business which originates in southern and eastern Europe is peculiarly attractive to the companies, as many of the immigrants travel back and forth, thus insuring east-bound as well as west-bound traffic. . . .

IMMIGRATION OF DISEASED ALIENS

Prior to 1882, when the federal Government first assumed control of immigration, the movement was practically unregulated. No process of selection was exercised among the immigrants who came between 1819 and 1882, and as a result the diseased, defective, delinquent, and dependent entered the country practically at will. With the development of federal immigration laws the situation in this respect has entirely changed, and while, unfortunately, the present law, from the difficulty in securing proof, is largely ineffectual in preventing the coming of criminals and other moral delinquents, it does effectively debar paupers and the physically unsound and generally the mentally unsound. . . .

IMMIGRANTS IN MANUFACTURING AND MINING

A large proportion of the southern and eastern European immigrants of the past twenty-five years have entered the manufacturing and mining industries of the eastern and middle western States, mostly in the capacity of unskilled laborers. There is no basic industry in which they are not largely represented and in many cases they compose more than 50 per cent of the total number of persons employed in such industries. Coincident with the advent of these millions of unskilled laborers there has been an unprecedented expansion of the industries in which they have been employed. Whether this great immigration movement was caused by the industrial development or whether the fact that a practically unlimited and available supply of cheap labor existed in Europe was taken advantage of for the purpose of expanding the industries, can not well be demonstrated. Whatever may be the truth in this regard it is certain that southern and eastern European immigrants have almost completely monopolized unskilled labor activities in many of the more important industries. This phase of the industrial situation was made the most important and exhaustive feature of the Commission's investigation, and the results show that while the competition of these immigrants has had little, if any, effect on the highly skilled trades, nevertheless, through lack of industrial progress and by reason of large and constant reinforcement from abroad, it has kept conditions in the semiskilled and unskilled occupations from advancing. . . .

ASSIMILATION OF IMMIGRANTS

It is difficult to define and still more difficult to correctly measure the tendency of newer immigrant races toward Americanization,

or assimilation into the body of the American people. If, however, the tendency to acquire citizenship, to learn the English language, and to abandon native customs and standards of living may be considered as factors, it is found that many of the more recent immigrants are backward in this regard, while some others have made excellent progress. The absence of family life, which is so conspicuous among many southern and eastern Europeans in the United States, is undoubtedly the influence which most effectively retards assimilation. The great majority of some of these races are represented in the United States by single men or men whose wives and families are in their native country. It is a common practice for men of this class in industrial communities to live in boarding or rooming groups, and as they are also usually associated with each other in their work they do not come in contact with Americans, and consequently have little or no incentive to learn the English language, become acquainted with American institutions, or adopt American standards. In the case of families, however, the process of assimilation is usually much more rapid. The families as a rule live in much more wholesome surroundings, and are reached by more of the agencies which promote assimilation. The most potent influence in promoting the assimilation of the family is the children, who, through contact with American life in the schools, almost invariably act as the unconscious agents in the uplift of their parents. Moreover, as the children grow older and become wage earners, they usually enter some higher occupation than that of their fathers, and in such cases the Americanizing influence upon their parents continues until frequently the whole family is gradually led away from the old surroundings and old standards into those more nearly American. This influence of the children is potent among immigrants in the great cities, as well as in the smaller industrial centers. . . .

COUNTRY OF ORIGIN, 1820 TO 1910

With respect to origin of the immigration to the United States a remarkable change has taken place. More than 70 per cent of the present immigration is from the south and east of Europe and only about 20 per cent is from the north and west of Europe. Two decades ago more than 70 per cent was from the north and west of Europe and less than 20 per cent from the south and east of Europe. . . .

For the period from 1820 to 1910, 92.3 per cent of the immigrants for whom country of origin was reported came from Europe, 58 per

cent being from the north and west of Europe, and 34.2 per cent from the south and east of Europe.[1] Only a very small proportion of the immigrants came from the south and east of Europe until in the late eighties. The proportion from that section of Europe reached 25 per cent for the first time in 1887. A notable shifting of the source of immigration took place between 1895 and 1896. In 1895, 54.7 per cent of the immigrants came from the north and west of Europe and 43.2 per cent from the south and east of Europe. In 1896, only 40 per cent came from the north and west of Europe and 57 per cent came from the south and east of Europe. . . .

CONCENTRATION IN CITIES

In 1900 the 10,341,276 foreign-born residing in continental United States were distributed by class of place of residence as indicated in the following table:

TABLE 14. — *Per cent distribution of native- and foreign-born population of continental United States, by class of place of residence: 1900*

Class of place of residence	Native-born	Foreign-born
Total	100.0	100.0
Cities of 2,500 or over	36.1	66.3
100,000 or over	15.5	38.8
25,000 to 100,000	6.7	10.8
8,000 to 25,000	6.6	9.2
4,000 to 8,000	4.4	4.6
2,500 to 4,000	2.9	2.9
Smaller cities and country districts	63.9	33.7

The preceding table shows clearly that the foreign-born population of continental United States is concentrated in cities to a much greater degree than the native population. Of the total foreign-born population, 66.3 per cent reside in cities having a population of at least 2,500, but only 36.1 per cent of the native population are so classed. The larger the cities, the greater the disparity between the percentages of foreign-born population and of native population residing in such cities. . . .

[1] Including Turkey in Asia.

As a result of the investigation the Commission is unanimously of the opinion that in framing legislation emphasis should be laid upon the following principles:

1. While the American people, as in the past, welcome the oppressed of other lands, care should be taken that immigration be such both in quality and quantity as not to make too difficult the process of assimilation.

2. Since the existing law and further special legislation recommended in this report deal with the physically and morally unfit, further general legislation concerning the admission of aliens should be based primarily upon economic or business considerations touching the prosperity and economic well-being of our people.

3. The measure of the rational, healthy development of a country is not the extent of its investment of capital, its output of products, or its exports and imports, unless there is a corresponding economic opportunity afforded to the citizen dependent upon employment for his material, mental, and moral development.

4. The development of business may be brought about by means which lower the standard of living of the wage earners. A slow expansion of industry which would permit the adaptation and assimilation of the incoming labor supply is preferable to a very rapid industrial expansion which results in the immigration of laborers of low standards and efficiency, who imperil the American standard of wages and conditions of employment.

The Commission agrees that laws should be passed:

1. To protect the United States more effectively against the immigration of criminal and certain other debarred classes. . . .

2. Sufficient appropriation should be regularly made to enforce vigorously the provisions of the laws previously recommended by the Commission and enacted by Congress regarding the importation of women for immoral purposes. . . .

4. To strengthen the certainty of just and humane decisions of doubtful cases at ports of entry it is recommended — . . .

5. To protect the immigrant against exploitation; to discourage sending savings abroad; to encourage permanent residence and naturalization; and to secure better distribution of alien immigrants throughout the country — . . .

7. The general policy adopted by Congress in 1882 of excluding Chinese laborers should be continued. . . .

8. The investigations of the Commission show an oversupply of unskilled labor in basic industries to an extent which indicates an

oversupply of unskilled labor in the industries of the country as a whole, a condition which demands legislation restricting the further admission of such unskilled labor. . . .

The following methods of restricting immigration have been suggested:

(*a*) The exclusion of those unable to read or write in some language.

(*b*) The limitation of the number of each race arriving each year to a certain percentage of the average of that race arriving during a given period of years.

(*c*) The exclusion of unskilled laborers unaccompanied by wives or families.

(*d*) The limitation of the number of immigrants arriving annually at any port.

(*e*) The material increase in the amount of money required to be in the possession of the immigrant at the port of arrival.

(*f*) The material increase of the head tax.

(*g*) The levy of the head tax so as to make a marked discrimination in favor of men with families.

All these methods would be effective in one way or another in securing restrictions in a greater or less degree. A majority of the Commission favor the reading and writing test as the most feasible single method of restricting undesirable immigration.

The Commission as a whole recommends restriction as demanded by economic, moral, and social considerations, furnishes in its report reasons for such restriction, and points out methods by which Congress can attain the desired result if its judgment coincides with that of the Commission.

B. *Immigration Legislation, 1882–1910* [1]

In addition to the general legislation concerning immigration, which is here described, the immigration of Chinese labor into this country has been prohibited. An attempt has been made three times — the last in 1914 — to impose an educational restriction upon immigration, but it has failed each time to become law.

. . . On August 3, 1882, the first general immigration law was approved.[2] This law provided that a head tax of 50 cents should be levied on all aliens landed at United States ports, the money thus collected to be used to defray the expenses of regulating immigration and for the care of immigrants after landing. . . . The law provided that foreign convicts (except those convicted of political offenses),

[1] *Reports of the Immigration Commission.* (Washington, 1911), II, 569–77.

[2] 18 Stat., pt. 5, p. 477.

lunatics, idiots, and persons likely to become public charges, should not be permitted to land.

On February 26, 1885, the first law forbidding the importation of contract labor was approved.[1] This law was defective, in that no inspection was provided for, nor was any arrangement made for the general execution of the provisions of the law or for the deportation of the contract laborer himself. This law was amended by the act of February 23, 1887. . . .

The immigration law of 1891 provided for a head tax of 50 cents, as was also provided in the law of 1882, the head tax being considered merely as a means of raising money for the proper administration of the law. Persons suffering from a loathsome or a dangerous contagious disease, and polygamists, were added to the classes excluded by the act of 1882, and it was also provided that "assisted persons, unless affirmatively shown that they did not belong to any excluded class," should be debarred. The contract-labor law was strengthened by prohibiting the encouragement of immigration by promises of employment through advertisements published in any foreign country, and transportation companies were forbidden to solicit or encourage immigration. . . . Another provision not found in the law of 1882 was that which allowed the return within a year after arrival of any alien who had come into the United States in violation of law, such return being at the expense of the transportation company or person bringing such alien into the country. . . .

With the exception of an amendment to an appropriation act in 1894 raising the head tax on immigrants from 50 cents to $1,[2] no immigration legislation was enacted until 1903. The agitation of the subject in Congress continued, however, and the period is interesting chiefly because of the adoption by both houses of Congress of a bill providing for an educational test for immigrants and the veto of the bill by President Cleveland.

As the bill went to the President it provided that persons physically capable and over 16 years of age who could not read and write the English language or some other language, parents, grandparents, wives, and minor children of admissible immigrants being excepted, were added to the excluded classes.

President Cleveland returned the bill with his veto on March 2, 1897. He objected to the radical departure from the previous

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[1] 23 Stat., p. 332.

[2] This was raised to $4 by the act of February 20, 1907. — Ed.

national policy relating to immigration, which welcomed all who came, the success of which policy was attested by the last century's great growth. . . .

By the act of March 26, 1910, sections 2 and 3 of the immigration law of February 20, 1907, were amended to more effectively prevent the importation of women and girls for immoral purposes. . . .

III. Labor Conditions

A. *General Conditions of Labor, 1900* [1]

In the reports of the Industrial Commission there are brought together the diverse and often conflicting views of employers, laborers, and students of the labor problem. In the following brief digest of some of the testimony taken by the Commission there is thus presented a symposium on the subject. Almost half of the nineteen volumes of their reports are devoted to the question of labor.

All the witnesses who spoke of the general condition of the working class as compared with what it was 20 or 30 or 50 years ago, agreed that it has improved. Money wages have increased, and the cost of particular commodities has, in general, diminished. The standard of life has accordingly risen. One witness notes, however, that the acquirement of some things which were luxuries in former years has been accompanied with the loss, in city communities, of wholesome things, such as chickens and good meat, pure milk and butter, which every workingman was able to have in the smaller communities of earlier times. [2]

Whether the conditions of the working people had improved within a shorter period, such as ten years, is not a matter of such general agreement. One witness, testifying in the spring of 1900, thought that though wages in the strongly organized trades were fully as high as they were ten years earlier, wages in the trades which were not firmly organized when the hard times came on were probably 10 per cent lower than before the panic of 1893. He thought that this was true in spite of some increase of wages, amounting to perhaps 8 per cent in his own city of Indianapolis, within the two years preceding his testimony. Mr. Wright, United States Commissioner of Labor, testifying at the end of 1898, declared that wages had

[1] *Reports of the Industrial Commission.* (Washington, 1900), XIV, xliii–lxxv, *passim.*

[2] Vol. VII: McNeill, 117; De Graffenried, 221, 222; Gompers, 615, 645, 654; Young, 696–698; Kennedy, 751, 752.

constantly decreased since 1893, though within two or three years there had been a slight reaction in factory employments.[1].

One or two witnesses, comparing the condition of working people in the United States and in European countries, think that the difference is less than it is popularly thought to be. One even holds that, in view of the comparative advantages of the two countries, the advancement in skill and enterprise, and the standards from which each started, the working classes of England are to be considered fully as well off as those of the United States. In confirmation of this he says that there is but little immigration from England to the United States, and that many who have come have returned. Mr. Willoughby, of the United States Department of Labor, while considering that the conditions of labor are undoubtedly better here, upon the whole, than in any European country, thinks that the coal miners are better off in Europe than in the United States, and that the British workmen in the steel trade, while not getting as high wages as ours, have more constant work and are better taken care of through various relief organizations. European workmen in general have more certain conditions of life. The German workman has the consciousness of protection against the pecuniary results of accident, sickness, old age, and death, through insurance provided by the state.[2]

The differences which exist between European countries and America, in the condition of the working class, are attributed to various causes. The chief are the great domain of rich soil which we have had at our disposal; the climatic conditions, which require better food and clothing and housing, and have helped to lead the workman to demand wages which will buy these things; the greater activity and productivity, which are believed to result both from the climatic conditions directly and from the more adequate nourishment; and the fact that the working people of Europe have emerged from a condition of serfdom to which the workers of America, except the negroes, were never subjected. The negroes of the South, it is declared, are in a position more like that of European workmen.[3]

Several manufacturers refer to the superior energy and productive power of the American workman. To this the possibility of cheap

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[1] Vol. VII: Kennedy, 739, 754, 755; Wright, 15.

[2] Vol VII: Gompers, 646, 647; Schonfarber, 448, 449. Vol. XIV: Willoughby, 179, 180.

[3] Vol. VII: Gompers, 646, 647.

production in the United States is attributed. It is declared that foreign workmen become more efficient, in a marked degree, after they have been a short time in this country. One manufacturer of worsted and woolen goods, however, thinks that the English working people in his line do better work than the American. This, he thinks, is because the English masters are able, on account of the surplus of good labor, to be more exacting and to require more careful work.[1] . . .

Hours of labor.— A universal desire is expressed, on the part of witnesses representing labor interests, for a lessening of the hours of work. Eight hours is named by the majority of witnesses as the limit which ought not to be exceeded. Several, including the president of the Cigar Makers' International Union, the secretary of the Boot and Shoe Workers' Union, and a representative of the Bricklayers' Union, think that six hours a day, at least in their own trades, would be enough. Mr. Gompers, president of the Federation of Labor, refers particularly to farm labor, and believes that it, as well as labor in other fields, might be and ought to be brought within an 8-hour limit. He points out that employers in several lines, who have said that the day of 8 hours, or even 9 or 10 hours, was impracticable in their particular occupations, have found that it could be made practicable when organized labor forced it upon them.[2]

Two great lines of argument are advanced in support of the desire for the shorter workday. One is the effect upon the physical, mental, and moral well-being of the workman. It is declared that greater leisure results in a lessening of dissipation and in moral and intellectual elevation, as well as in physical betterment. The second line of argument relates to industrial conditions. It is stated that the product per hour is increased as the day's work is shortened, and Mr. Gompers and Mr. Strasser, formerly president of the Cigar Makers' International Union, are confident that there is no diminution of the product per day. Several witnesses mention specific instances in which hours have been abridged without lessening output. Mr. Gompers and Mr. Strasser are apparently not of opinion, however, that the same man with the same appliances will generally produce as much in 8 hours as in 9 or 10. Their proposition is that increased

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[1] Vol. XIV: Steel, 237; Harrah, 354, 355; Weidmann, 704.

[2] Vol. VII: Spohn, 145; Perkins, 174, 179; Eaton, 366, 372; Gompers, 649, 650.

leisure causes increased opportunity for thought and improvement, and that thought and improvement give rise, on the one hand, to new tools and inventions, and, on the other hand, to new desires, which give opportunities for the use of the new machines. Mr. Gompers also holds that under existing conditions the lessening of hours is necessary to prevent the throwing of large numbers of men out of work by improvements in machinery and processes. He is confident, however, that there is not, upon the whole, any real advantage to the employers in long hours. The Southern textile factories have advantages in the nearness of raw material and the cheapness of labor, but their long day is not in itself an advantage.[1]

Many workingmen hold that the lessening of hours is likely to raise wages rather than to lower them. . . .

LABOR ORGANIZATIONS

Membership and growth.— The testimony shows clearly that industrial prosperity is favorable to the growth of labor organizations. From 1892 to 1897 the membership of those in New York State decreased 100,000. From March 31, 1897, to June 30, 1900, a comparatively prosperous time, there was an increase of more than a hundred thousand. The growth is said to have been chiefly outside the city of New York. The city has been for some time pretty thoroughly organized. The commissioner of labor statistics of New York, testifying in September, 1900, thought that the organizations included 75 per cent of the workers at mechanical trades in the State, and perhaps one-eighth of all wage earners. Of Indiana it was stated in May, 1900, that the unions were stronger than five years earlier, but not quite as strong as ten years earlier. The old unions maintained their wages and hours and their organization through the hard times; but the new organizations lost members, and many disappeared.[2]

Attitude of employers.— Several witnesses agree in stating that the attitude of employers toward the unions is, on the whole, growing more favorable. Mr. Wright, United States Commissioner of Labor, says that employers are glad to have the cooperation of unions if they are directed by men of business experience and integrity, as the typographical union and the glass blowers' unions are.

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[1] Vol. VII: Bullock, 521, 522; Strasser, 267; Gompers, 627, 650–652; Kennedy, 645.

[2] Vol. VII: McMackin, 799–801, 807; Kennedy, 739.

Yet it is pointed out that the favorable change of attitude does not appear everywhere.[1]

Mr. Brooks declares that the growth of socialism in such New England towns as Brockton and Haverhill results from the feeling of the workingmen that their trade organizations can effect nothing. If manufacturers want to make socialists in this country they have only to "smash the unions." [2] . . .

Necessity of strikes.— There is little dissent from the opinion that strikes are a necessary weapon of the workingman under existing social conditions. Mr. Gompers, president of the American Federation of Labor, does not believe that strikes can be entirely eliminated from our system of society, though he seems to hope that by a thorough organization of both the workers and the employers it will be possible, in a great measure, to secure their beneficent results without interrupting industry and commerce. He says, however, that every labor organization ought to accumulate a defense fund. Employers who know that their men have a defense fund which will enable them to resist will not lightly try to reduce wages, increase the hours of labor, or enforce obnoxious conditions. Labor organizations which have small funds or none are obliged to yield to deductions of wages when industrial depression comes, and when business revives they are the last to receive any of the benefits. He holds adequate preparation for strikes to be the best means of preventing them. No matter how just a cause is, unless it is backed up with power it will be crushed. Disputes are determined by contest and conquest, except when there is like power on both sides; then they are determined by reason. The same view is expressed by Bishop Potter. He says that the employers are likely to contend against increase of wages or shortening of work days until they realize that the employees have force enough to meet them in a contest. Bishop Potter regards the strike as a reversion to barbarism, but considers that it is necessary under present conditions, just as war is necessary.[3] . . .

Compulsory arbitration.— A considerable number of witnesses favor a general application of compulsory arbitration in labor differences. It is strongly advocated by two who are strenuously opposed to trade unions, and who seem to view it as a means of

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[1] Vol. VII: Wright, 16. Vol. XIV: McCormack, 59, 60; Fox, 149; O'Brien, 431.

[2] Vol. XIV: Brooks, 140–142.

[3] Vol. VII: Gompers, 598, 599, 607, 609. Vol. XIV: Potter, 11.

repressing their activity. One of them says, in terms, that he would not have labor organizations recognized as such by law or by the arbitration board. Some representatives of the unions, however, are also in favor of compulsory arbitration, and seem to view it as a means of securing the public investigation of the actions of employers.[1] . . .

A very large number of witnesses, however, are absolutely opposed to compulsory arbitration under any circumstances. It is argued that to compel men to work on terms which they are not willing to accept is slavery, and that to compel employers to run their works and pay wages they are not willing to pay is confiscation. Several representatives of the workmen add that the action of any governmental body, such as a court of arbitration, would probably be hostile to the men, as the action of the courts usually is.[2] . . .

Arbitration and conciliation by State boards. — A considerable number of States have provided by statute for State boards, whose duty is the settlement of labor disputes. These boards have not been active, however, except in some half dozen States. Those of New York and Massachusetts have been especially prominent, though the boards of New Jersey, Ohio, Indiana, and Illinois have also done active work.

Very little seems to have been accomplished in the way of actual arbitration. Neither the employers nor the workingmen seem to be generally desirous of arbitration by the State boards. . . .

Trade negotiations and agreements.— There is an almost universal agreement that direct negotiations between the parties are the best means of settling differences when such negotiations can be brought about. If an agreement can not be reached in this way, the next best thing is generally considered to be a board of arbitration, chosen by the parties themselves from among employers and employees in the same industry, but unconnected with the existing dispute. This plan offers the great advantage of providing judges familiar with the technical matters to be brought before them, as well as judges personally satisfactory to the disputants. If such a board can not reach an agreement, an outside umpire may be called in, and if the appointment of such a board is not found practicable the whole decision may sometimes be committed with advantage to persons un-

[1] Vol. VII: Sherman, 378–380; Thompson, 757–763, 772–774; Coffin, 778, 784, 788, 791; Kelley, 973, 974. Vol. XIV: Brooks, 142.

[2] Vol. VII: Wright, 11, 12; Strasser, 262; Schaffer, 388, 389; Gompers, 612, 613; Walcott, 910, 911.

connected with the trade. Bishop Potter speaks of the board of mediation and conciliation of New York City, a voluntary organization established by him and several other persons interested in the betterment of social conditions. This board is declared to have won the confidence of the working men and to have been of material assistance in the settlement of several trade disputes.[1]

In several trades, as the steel industry and stove founding, wages, hours, and other conditions of employment are fixed by agreement, either annually or at other intervals, between associations of the employers and of the employees. The witnesses who have participated in such agreements, as well as others who refer to them, regard this plan as most beneficial wherever it can be brought about. . . .

B. *National Labor Organizations, 1901* [2]

The two most successful and important attempts to unite all workers in a single labor organization are here described.

As an association of wage-earners, the trade union began to be possible only when a distinct wage-earning class arose. So long as hand workers were in large part men who wrought their own materials or the materials of their customers with their own tools, no wage-earning class, such as we know, existed. . . .

Two important attempts have been made in the United States to go beyond the national organization of a trade or an industry, and to bring all the wage-earners of the country under a single jurisdiction. The first was that of the Knights of Labor. This organization was formed in 1869. It maintained a relatively quiet existence, growing steadily but moderately, until about 1885. At that time events brought it very prominently before the public eye, and its membership rose in a year's time from about one hundred thousand to six or seven hundred thousand. It was disastrously defeated in some contests with employers, and sank into comparative obscurity almost as rapidly as it had risen.

The fundamental idea of the Knights of Labor is the unity of all workers. Its characteristic motto is, "An injury to one is the concern of all." It regards this unity of interest as necessitating unity of policy and of control; it conceives that unity of control can

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[1] Vol. VII: Garland, 87, 97; McNeill, 117; Bishop, 478; Gilbert, 875. Vol. XIV: Potter, 1, 2; Leake, 279, 287.

[2] *Final Report of the Industrial Commission.* (Washington, 1902), XIX 793, 798–9, 806.

be effected only by concentrating all responsibility and power in the hands of the men who may be chosen to stand at the head of affairs. The control of the organization rests wholly in the general assembly, and except when the general assembly is in session the orders of the executive officers, elected by the general assembly, are required to be obeyed by all members. While the several trades are separately organized within the order, so far as this is practicable, every such separate trade organization is subject to the control of the general officers. . . .

The second great effort to unite the wage-earners in a single organization is that of the American Federation of Labor. The Federation differs from the Knights in that it tries to make itself distinctly an organization of wage-earners, while the Knights desired to include all productive workers, whether or not they received their compensation in the form of wages. More important, perhaps, it differs also in its form of organization, and in the ideas of policy which lie at the basis of the form of organization. The Knights of Labor may be compared to the "republic, one and indivisible," which was the ideal of the revolutionary statesmen of France. The Federation is based on that principle of alliance, and union for certain purposes, of independent minor republics, upon which the union of the American States proceeded. Each trade is independently organized, not, it is conceived, by virtue of any authority emanating from the head of the whole, but by its own independent power. Each trade organization retains its sovereign control of its internal affairs, and only joins with the others in a federal organization for the consideration of common interests and the promotion of the common good. The American Federation of Labor now includes an overwhelming majority of the organized workers of America. The strongest of the railroad brotherhoods — the engineers, the firemen, the conductors, and the trainmen — remain outside of it, and so do a few other important organizations. With the exception, however, of the four great railroad brotherhoods referred to, it is not improbable that the majority of the members of labor organizations outside the Federation are in the local unions which have no direct affiliation with any other body, excepting, perhaps, the central labor unions or trades assemblies of their cities. . . .

The union has two general methods of bettering the economic condition of its members. It may try to strengthen the strategic position of the individual workman in dealing with the employer, or it may take the function of bargaining altogether out of the hands

of the individual. The former policy involves an attempt to diminish the number of competitors in the trade. The latter has no necessary reference to the number of individual workers, but involves the placing of the interests of all the workers under a single control, so that the whole amount of labor power available in the trade may be handled in the market as a unit. . . .

C. *Membership of Trade Unions in the United States, 1901* [1]

As no official statistics of the membership of trade unions are gathered, all statements of their numbers are at best estimates, but the one given here is a very careful one. In general about ten per cent of the men at work along industrial lines belong to trade unions.

The following table gives a rough estimate of the aggregate membership of the labor organizations of the United States on July 1, 1901:

Estimated membership of labor organizations in the United States on July 1, 1901

Unions affiliated with the American Federation of Labor	950,000
Custom-clothing makers	3,800
Lithographers	2,100
Bricklayers	39,000
Plasterers	7,000
Stonecutters	10,000
Box makers	5,500
Piano workers	7,700
Engineers, marine	6,000
Engineers, locomotive	37,000
Firemen, locomotive	39,000
Conductors, railway	25,800
Trainmen, railroad	46,000
Switchmen	15,000
Letter carriers	15,000
Knights of labor and enumerated organizations, say	191,100
Total	1,400,000

D. *Membership of American Federation of Labor, 1897–1913* [2]

Most of the labor organizations in the United States are united in a federal body known as the American Federation of Labor, so that the growth in membership of this organization reflects fairly accurately the growth of trade unionism in the country. As some very strong unions are not affiliated with this body, the total membership of all trade unions is somewhat greater than these figures indicate.

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[1] *Reports of the Industrial Commission.* (Washington, 1901), XVII, xix.

[2] *Report of Proceedings of the Thirty-third Annual Convention of the American Federation of Labor.* (Washington, 1913), 41, 111–2.

The average paid-up and reported membership for the year is 1,996,004, an increase of 225,859 members over last year. . . .

The following is the average membership reported or paid upon for the past sixteen years:

Year	Membership	Year	Membership
1897	264,825	1905	1,494,300
1898	278,016	1906	1,454,200
1899	349,422	1907	1,538,970
1900	548,321	1908	1,586,885
1901	787,537	1909	1,482,872
1902	1,024,399	1910	1,562,112
1903	1,465,800	1911	1,761,835
1904	1,676,200	1912	1,770,145
		1913	1,996,004

. . . This report like all the other annual reports of the officers and representatives of the American Federation of Labor brings out forcibly the continuity of the organized trade union movement. It is not a series of spasmodic, unrelated efforts to improve the condition of the workers, but it is a consistent, logically developed plan based upon certain unchanging, fundamental principles. Each convention is constantly referring back to the work of previous conventions; during the year, the Executive Council takes up the work, follows out the directions of the conventions, and works out new problems upon lines in harmony with the declarations of purposes and principles enunciated by previous conventions. . . .

The trade union movement of America is founded upon fundamental principles of human freedom and liberty. Whatever new problems have arisen, whatever complications of old problems or of new and old problems, they have always been solved by some method that harmonized with the purposes of the movement — the effort to insure to each individual the right to self-development, independence and freedom. Like some masterpiece of music is this movement of the toilers, though there is difference and variety, though there is changing mood and feeling to interpret the developing theme, yet through it, all pervading, is an exquisite tone of harmony that gives the sense of unity and purposefulness. . . .

E. *Labor Legislation, 1903* [1]

The main lines of labor legislation of a protective character are here described as they existed at the end of 1903. A considerable advance has been made since then, especially in more constructive social legislation.

[1] *Labor Legislation in the United States.* By G. A. Weber. Bulletin of the Bureau of Labor, No. 54, September, 1904 (Washington, 1904), 1421–1444, *passim.*

In considering the labor legislation enacted in the various States it must be remembered that in States in which manufacturing and mining industries prevail, such as New York, Pennsylvania, Massachusetts, Illinois, Ohio, Connecticut, etc., there is more occasion for the enactment of such legislation than in States where industries are mostly agricultural, as in the South and West. . . .

Laws for the regulation of labor in factories, workshops, mercantile establishments, sweat shops, bakeries, laundries, and on building-construction work have been enacted in the various States for the purpose of protecting the health and safety of employees (see chart). For the proper enforcement of these regulations many of the States have made provision for inspection services.

In 27 States the laws provide for the appointment of inspectors of factories and workshops, whose duties consist of visiting and inspecting factories, workshops, mills, and, in some cases, mercantile establishments, sweat shops, bakeries, laundries, and building-construction work, and enforcing the laws concerning the same. . . .

What are usually known as factory acts relate to (1) the protection of the health of employees, such as regulations requiring the proper ventilation, lighting, and heating of factories and workshops, the provision of exhaust fans to prevent dust or other deleterious products from being inhaled by the operatives, the lime washing or painting of walls, the provision of seats and separate toilet facilities for females, and the prohibition of overcrowding; (2) the prevention of accidents, such as regulations prohibiting the employment of women and children to clean machinery in motion or operate dangerous machinery or of children to run elevators, requiring that machinery and vats combining molten metal or hot liquids be properly guarded, that mechanical belt and gearing shifters, means of communication between the engineer's room and rooms where machinery is used, and safety appliances on elevators be provided, that hoistway openings be properly railed off, that sides or railings be placed on stairways, that special precautions be taken in cases of dangerous or injurious occupations, or where explosive or highly inflammable compounds are handled, that fire escapes be provided, and that doors in factories and workshops be so hung as to open outward, and that they be kept unlocked; and (3) the conditions of employment of women and children, such as regulations restricting the hours of labor, prohibiting night work, and requiring intervals of rest during the working day. . . .

Mine-labor legislation is necessarily confined to States and Terri-

tories which produce coal or other minerals in sufficient quantities to justify the enactment of special laws for the protection and safety of persons employed in the mines. Thirty-four States and Territories and the Federal Government have enacted laws of this character. The Federal statute applies to the organized and unorganized Territories having coal mines in operation. . . . .

The provisions for the regulation of mines are quite similar in the leading mining States, the difference being mainly in the extent to which regulation is undertaken. They may be grouped into the following classes, namely: Provisions of law (1) concerning employment in mines; (2) insuring the health and safety of mine employees; (3) making special regulations for mines generating fire damp or other explosive gases; (4) protecting the rights of miners by regulating the manner of weighing or measuring the quantity of coal mined. . . .

The railway labor laws enacted by the various States and by the Federal Government (see chart) have, with few exceptions, the object of protecting the health and safety and the rights of employees, and of reducing to a minimum the liability of the traveling public to accidents and inconvenience on account of acts of employees. They may be considered under five groups, namely: Laws (1) regulating the employment of certain classes of persons, (2) prohibiting certain acts of railway employees, (3) protecting the rights of railway employees, (4) requiring certain mechanical equipment on railways for the protection of the health and safety of employees, (5) concerning the reporting and investigating of accidents to employees. . . .

Hours of Labor.— The statutes relating to hours of labor (see chart) that have been enacted in the various States may be considered under five groups, namely: (1) General laws which merely fix what shall be regarded as a day's labor in the absence of contract; (2) laws defining what shall constitute a day's work on public roads; (3) laws limiting the hours of labor per day on public works generally; (4) laws which limit the hours of labor in certain occupations; (5) laws which specify the hours per day or per week during which women and children may be employed. The statutes considered in the first four groups relate to employees regardless of age or sex. . . .

The following 10 States have passed laws declaring that eight hours shall be regarded a legal day's work unless otherwise agreed: California, Connecticut, Illinois, Indiana, Missouri, Montana, New York, Ohio, Pennsylvania, and Wisconsin. The following 7 States fix the legal working-day at 10 hours: Florida, Maine, Michigan,

Minnesota, Nebraska, New Hampshire, and Rhode Island. In New Jersey a week's work is defined as consisting of 55 hours. . . .

All States and Territories except Arizona, California, Idaho, Nevada, and the Philippine Islands have laws prohibiting the employment of labor on Sundays. In California, however, it is a misdemeanor for any employer to cause his employees to work more than six days in seven except in cases of emergency. . . .

Much of the legislation enacted for the protection of women employees (see chart) is similar to that for child labor. In many cases the same provision of law applies to both women and children. This is especially true in the case of legislation concerning hours of labor and employment in mines and barrooms. The existing statutes concerning female labor may be grouped as follows: (1) Statutes prohibiting the employment of women in certain occupations, as in mines, underground workings, and smelting and refining works, in barrooms, and in operating dangerous machinery or cleaning machinery while in motion; (2) statutes limiting the hours of labor; (3) statutes prohibiting or restricting night work; (4) statutes requiring seats for female employees; (5) statutes requiring separate toilet facilities for female employees; (6) legislation not included in the above groups. . . .

In 18 States and 1 Territory a limitation has been placed upon the number of hours per day or per week that women may work in manufacturing, mechanical, or mercantile establishments. In nearly all of these States the same provisions which relate to women apply also to children. . . .

Five States prohibit the employment of women at night. . . .

Thirty-one States and the District of Columbia have laws requiring employers to provide seats for the use of female employees when they are not actively engaged in their duties. . . .

Seventeen States and the District of Columbia have laws requiring employers to provide toilet facilities for the separate use of females when employed. . . .

Legislation relating to child labor is so varied in character in the different States and Territories that it is difficult to classify it satisfactorily. For the purpose of the present outline it has been most convenient to consider child-labor legislation under the following groups: (1) Statutes fixing an absolute age limit for the employment of children in all gainful occupations or in one or more of the principal groups of industries; (2) statutes prohibiting the employment of children of school age or of illiterate children during school time or

unless they have complied with certain educational requirements; (3) statutes prohibiting the employment of children in dangerous, injurious, or immoral occupations, such as selling or handling intoxicating liquors, or as rope or wire walkers, gymnasts, contortionists, street singers or musicians, mendicants, itinerant peddlers, etc.; (4) statutes prohibiting certain dangerous operations, such as running elevators, cleaning machinery in motion, or operating dangerous machinery, etc.; (5) statutes restricting the hours of labor or prohibiting night work on the part of children; (6) legislation not included in the above groups.

The age limit prescribed by law in the different States, under which employment is absolutely prohibited, is either 16, 14, 13, 12, or 10 years. As above stated, the law applies in some States to only one, in others to several groups of industries. In some cases an age limit is prescribed under which children can not be employed except during vacation, and in some an age limit is fixed under which persons can not be employed in certain occupations or during certain hours. . . .

F. *Workmen's Compensation, 1913*[1]

Probably no subject connected with the improvement in the position of labor has received more widespread recognition and support in recent years than that of the indemnification of workmen for injuries received in the pursuit of their work. Lack of space prevents adequate discussion, but this extract will indicate the importance of the subject.

The Fourth Special Report of the Commissioner of Labor, issued in 1893 under the title of "Compulsory Insurance in Germany," was the first report published in this country devoted to the subject of workmen's insurance. At that time compensation for industrial accidents had been established by law in two countries only, Germany in 1884, and Austria in 1887; the third country — Norway — not following until 1894. In the other countries discussed in the appendix of this early report the workmen's compensation movement had not passed beyond the stage of Government commissions and legislative discussion.

Since the publication of this first report, the development of the legislation providing for workmen's compensation for industrial accidents in Europe and throughout the world has been extremely rapid;

[1] *Workmen's Compensation Laws of the United States and Foreign Countries.* Bulletin of the United States Bureau of Labor Statistics, No. 126 (Washington, 1914), 9–10.

in fact, it may be doubted whether any subject of labor legislation has ever made such progress or gained so general acceptance for its principles throughout the world in so brief a period. The legislative summaries in the present report show that 41 foreign countries (including all European countries except Turkey) have introduced some form of workmen's compensation for industrial accidents, all of which, while showing great variations in the industries covered, the amount of compensation provided, and the methods by which compensation payments are secured, recognize the principles of compensation as distinguished from the older idea of employer's liability previously accepted in the civil law of continental Europe, as well as in English and American law.

In the United States what might be called the period of investigation and education began somewhat late as compared with European countries. But since that beginning, investigation and study have been followed by legislative action with great rapidity. The first American State commissions were appointed in New York, Wisconsin, and Minnesota in 1909, and legislation followed in New York in 1910, in Wisconsin in 1911, and in Minnesota in 1913. Within this period beginning with 1909, 27 commissions (not including one Federal commission) have been appointed to consider the subject of compensation, and compensation legislation has been enacted in 23 States.

G. *The Federal Compensation Act, 1908* [1]

The federal government was a pioneer in the United States in the enactment of legislation granting compensation to employees injured while at work. It thus recognized the necessity of placing the social cost of industrial accidents upon the industry itself rather than upon the laborer. Its example has since been followed by the leading industrial and mining states of the Union.

Injuries to workmen in the course of their employment may be due to negligence or to accident. Where negligence is the cause, the fault may be that of the workman or his employer, of a fellow workman, or even a stranger. Where accident is the cause, no one is at fault. In all cases the suffering and the loss fall on the injured person and his dependents, except in so far as the law permits the loss to be compensated. The rules of the common law, which were formulated at a time when industrial operations were simple and conducted in small establishments where responsibility could easily be fixed, permitted

[1] *Opinions of the Solicitor for the Department of Commerce and Labor dealing with Workman's Compensation . . . from August, 1908, to August, 1912.* (Washington, 1912), 9–11.

recovery only where the workman or his representatives could establish negligence on the part of the employer, and denied relief if his own negligence in any way contributed to the injury or if the injury was due to the negligence of a fellow servant or a stranger, and also compelled the worker to assume the risks incident to a dangerous employment. For injuries due to accidents alone there could be no recovery, since a legal wrong could be imputed to no one. The altered situation, growing out of the immense changes made in industrial conditions, brought a realization of the great injustice worked by established rules of law. Irrespective of the negligence of the employer or a fellow servant or a stranger, and irrespective of the risks incident to dangerous occupations, it was recognized as grossly unjust that the victim alone should be allowed to bear the entire consequences and all the burden of an industrial accident or injury. It was seen that the employment itself, if not the cause of the injury, furnished at least the occasion or the condition without which it could not have occurred. The principle was then formulated and accepted that the financial loss occasioned by injuries received in the course of employment was a proper charge against the industry itself, at least where the injury was not plainly due to the negligence or misconduct of the person injured. A means was thus provided whereby the burden in such cases could be shifted in a measure from a single victim and distributed among many persons.

This principle was adopted and applied by the Federal Government in the act of May 30, 1908, "granting to certain employees of the United States the right to receive from it compensation for injuries sustained in the course of their employment." Although this act is of limited application and provides but a limited measure of relief, its benefits have been many and real. It applies only to injuries received by artisans or laborers employed in the manufacturing establishments, arsenals, or navy yards of the United States, or in river and harbor or fortification work, or in hazardous employment in the Reclamation Service and under the Isthmian Canal Commission, under the Bureau of Mines and in the Forestry and Lighthouse Services. But any such workman, injured in the course of his employment, is entitled to receive for one year thereafter, unless sooner able to resume work, the same pay as if he continued to be employed, except where the injury was due to his own negligence or misconduct. If the injury should result in death during the year, the compensation allowed is payable to the widow or children or dependent parent. . . .

An idea of the benefits derived under the compensation act may be obtained from a consideration of a few figures. The act has been in operation since August 1, 1908. Between that date and December 1, 1911, compensation was paid in 5,564 cases of injury, in 165 of which the injury resulted in death. On account of these fatal injuries $112,879.02 has been paid to surviving dependents. On account of the nonfatal injuries $704,814.60 has been paid to the injured persons themselves. . . .

H. *Wages and Prices, 1870–1901* [1]

The changes in wages and prices between 1870 and 1901 resulted in a decline in prices and a rise of wages, so that the net result was distinctly favorable to the wage receivers. Since that time, however, there has been a net decline in wages.

In considering the changes which have occurred in recent years in the earnings of labor there are two factors to be taken into account, namely, money wages and cost of living.

. . . The accompanying table and chart are designed to show the movements of wages. . . . The compilations of the Department of Labor for the years 1870 to 1898 include 25 occupations, representing building trades, machine trades, and the higher grades of railroad employees, together with street laborers and teamsters. Another compilation of the Department of Labor, covering the years 1891–1900, includes 192 occupations. Each of these series of wage statistics has been compiled in the accompanying table, and has been graphically presented in the accompanying chart, by taking the average wages of the year 1891 as a standard, equivalent to 100, and then computing the wages of other years as percentages of this standard year. By this method it can be seen that wages in the 25 selected occupations touched the lowest point in 1876, when they stood at 85.5 per cent of the figure for 1891, and that from that time until 1893 there was a steady increase, followed by a decline, until 1898, when they stood at 95.62 per cent of the figure for 1891. At the same time, the wages of the 192 occupations for the years 1891 to 1898 show a close parallel with those of the 25 selected occupations, and from 1898 to 1900 they rose 4.6 per cent. . . .

At the same time the decrease in the cost of many of the commodities most used by the working classes is a factor which has tended to make their actual, as distinguished from money wages, greater. . . .

[1] *Final Report of the Industrial Commission.* (Washington, 1902), XIX, 730–734, *passim.*

Relative movement of wages and wholesale prices

Year	Prices (in gold) [1]	Prices [2]	25 occupations, wages gold (wages for 1891 being 100) [3]	Wages, 192 occupations [4]	Wages of farm labor (in gold) per month without board [5]
1869	.....	..	.....	....	104.8
1870	119.0	..	84.64	.....	.....
1871	122.9	..	94.00	.....	.....
1872	121.4	..	96.26	.....	.....
1873	114.5	..	92.13	.....	.....
1874	116.6	..	90.46	.....	....
1875	114.6	..	88.11	.....	92.9
1876	108.7	..	85.65	.....	.....
1877	107.0	..	88.21	.....	.....
1878	103.2	..	90.66	.....	.....
1879	95.0	..	91.12	.....	88.3
1880	104.9	..	91.94	.....	.....
1881	108.4	..	94.59	.....	.....
1882	109.1	..	96.16	.....	101.7
1883	106.6	..	97.05	.....	.....
1884	102.6	..	97.83	.....	.....
1885	93.3	..	97.15	.....	96.6
1886	93.4	..	97.15	.....	.....
1887	94.5	..	97.93	.....	.....
1888	96.2	..	98.52	.....	98.0
1889	98.5	..	98.82	.....	.....
1890	93.7	..	99.31	.....	98.6
1891	94.4	95	100.00	100.00	100.0
1892	.....	90	100.59	100.30	.....
1893	.....	90	99.94	99.32	102.6
1894	.....	82	97.98	98.06	95.4
1895	.....	81	97.19	97.88	95.1
1896	.....	77	96.60	97.93	.....
1897	.....	73	96.11	98.96	.....
1898	.....	79	95.62	98.79	104.2
1899	.....	77	.....	101.54	108.7
1900	.....	90	.....	103.43	.....
1901	.....	88	.....	.....	.....

[1] Jan. 1. (Aldrich Report, Senate Rep., 52d Cong., 2d sess., Pt. I, p. 100.)
[2] Year ending June 30. (Bureau of Economic Research.)
[3] Year ending Dec. 31. (Bulletin, Department of Labor, Sept., 1898.)
[4] Year ending Dec. 31. (Bulletin, Department of Labor, July, 1900.)
[5] Year ending Dec. 31. (Dept. of Agr., Bulletin 22, Mis. Series, 1901.)

Taking into account these observations, it must be concluded that the daily rate of wages is not a safe measure of the changing conditions of labor, and that in a discussion of the progress of the working population account must be taken of the amount of annual employment, depending on general conditions of prosperity and depression, the life earnings of the worker, depending upon the increasing intensity of exertion and overwork, and the increased necessary expenses of city life.

I. *Higher Cost of Living, 1910*[1]

Wages may be nominally high, that is, the laborer may receive a larger number of dollars than formerly, but if the prices of the commodities for which he spends his money have also advanced, his real wages may have remained stationary or even declined. Hence it is very important in every investigation of wages to establish also the movement of prices.

The advance in prices has been world-wide, although the products of the farm and food products have advanced much more rapidly than have manufactured articles. This is probably due to two causes; first, the prices of farm products and of food are more sensitive than manufactured commodities and would therefore respond more quickly to causes producing higher prices; and, second, a study of the course of prices of such farm products and food as are produced in the United States indicates that the demand has outgrown the production of such commodities, and that the production of manufactured articles and of articles usually imported into the United States have outgrown our production of farm products and domestic food supplies. This condition has no doubt been brought about to a considerable extent by the withdrawal from the farms of large numbers of persons who have entered industrial pursuits and become food consumers rather than food producers, and to the rapidly increased cost of production of farm products. . . .

Retail prices in the United States in the spring of 1910 were for many articles at the highest point reached for many years. As compared with the spring of 1900 prices for bacon were more than 70 per cent higher, ham was 33 per cent higher, flour was about 50 per cent higher, butter about 45 per cent higher, sugar 12 per cent higher, and eggs 100 per cent higher. Some few articles, such as coffee and tea, were about the same price as in 1900, but practically no articles of food were lower than in 1900. . . .

[1] *Investigation Relative to Wages and Prices of Commodities.* 61st Cong., 3d sess., Sen. Doc. No. 847 (Washington, 1911), I, 10, 37, 52.

Wages have not advanced as rapidly as have prices and practically all labor difficulties which have been the subject of mediation in the United States during the past two or three years have had as their basis the advanced cost of living. In the United States wages have advanced much more rapidly than they have in European countries, in fact in some European countries practically no advance has been made during the ten years under consideration.

Wages in the United States advanced in about the same degree as did prices until 1907. Owing to the industrial depression of 1908, following the financial panic of the fall of 1907, wages dropped considerably and in 1909 hardly more than regained the high point reached in 1907.

Wages at the present time are not on as high a level as are food prices. Salaries have advanced but very little during the past ten years.

Hours of labor in practically all wage occupations have been reduced. The United States Bureau of Labor compilation of wages and hours of labor in the principal manufacturing industries has not been continued later than 1907. In 1907, wages were 22.1 per cent above 1900. Hours of labor per week during the same period were reduced 3.7 per cent. The decline in hours of course affected the weekly earnings of employees for the reason that the large majority of wage earners are employed either on the piece basis or at an hourly rate. From 1900 to 1907 full time weekly earnings advanced 17.6 per cent, while wholesale prices of commodities advanced 17.2 per cent, or in almost exactly the same proportion.

J. *A Nation at Work, 1880*[1]

It has generally been remarked that in the United States there is practically no leisure class; ninety-three per cent of the men in the productive age periods from 16 to 60 are at work and the rest are presumably preparing for work. Apparently the women show a larger proportion not engaged in gainful occupations, but if we allot one woman as housekeeper to each of the 10,000,000 families in the country in 1880, the proportion of the unoccupied among the women is about the same as for the men. Since 1880 the proportion of the population over ten years of age engaged in gainful occupations has increased.

The following table makes comparison between the number of inhabitants of either sex in each of the periods of life, taken for the purposes of these tables, and the corresponding number of persons returned as pursuing gainful occupations:

[1] *Statistics of the Population of the United States at the Tenth Census.* (Washington, 1883), I, 704.

	Total 10 years and upward		16 to 59	
	Male	Female	Male	Female
Population (10 years of age and upward)	18,735,980	18,025,627	13,907,444	13,377,002
Number on occupation tables	14,744,942	2,647,157	12,986,111	2,283,115
Unaccounted for	3,991,038	15,378,470	921,333	11,093,887

Between 16 and 59 the number of males unaccounted for is 921,333 [or 7 per cent]. This number is made up chiefly of the following classes: First, those students who are pursuing courses of study beyond the age of 16; second, those who are afflicted by permanent bodily or mental infirmities, disqualifying them from participating in the industry of the country; third, the members of the criminal and pauper classes. The number of men of this period of life, not disabled, who are not returned as of some occupation by reason of inherited wealth or of having retired from business is hardly important enough in this country to be mentioned. The number of females between 16 and 59 not accounted for in these tables is, naturally, vastly larger, and amounts to 11,093,887 [or 83.5 per cent]. That body is made up of the three classes just mentioned when speaking of the males of this period of life, and of the far greater classes of women — wives, mothers, or grown daughters, keeping house for their families or living at home without any special avocation. . . .

CHAPTER XXIII

ECONOMIC PROGRESS, 1860–1915

I. Wealth of the People of the United States

National Wealth, 1850–1912 [1]

In an effort to gauge the economic progress of the last half century we may properly begin with an estimate of the increase in the wealth of the people of the United States. This has grown from a total of 7 to 187 billion dollars, between 1850 and 1912, while the per capita amount has increased from $308 to $1965 in the same period. The character of this wealth and its amount in comparison with that of other countries are also shown in this extract. All the facts show a large and rapid increase in the wealth of the nation as a whole.

Table 1. — Estimated True Value of all Property

Date	Total	Per Capita
1850	$7,135,780,228	$308
1860	16,159,616,068	514
1870	24,054,814,806 [1]	624
1880	43,642,000,000	870
1890	65,037,091,197	1,036
1900	88,517,306,775	1,165
1904	107,104,192,410	1,318
1912	187,739,071,090	1,965

[1] Gold basis.

. . . These estimates have been prepared upon two different bases and by a number of different methods. The estimates for 1850, 1860, and 1870 were confined to taxable real property and the personal property of private individuals, firms, and corporations. They did not include any estimates of the value of the public domain nor of other exempt realty, nor of the value of the furniture or equipment of public buildings of governments nor of charitable, religious, or educational institutions, all of which were included in the estimates for 1880, 1890, 1900, 1904, and 1912. . . .

Estimates for 1912 and 1900. — Table 2, which follows, affords a ready means of comparing the total values of the several classes of wealth in 1912 with those of 1900. . . .

[1] *Estimated Valuation of National Wealth, 1850–1912. Census Bulletin* (Washington, 1915), 14–16, 18–20.

TABLE 2. — Estimates of Wealth for 1912 and 1900

(in millions of dollars)

Form of Wealth	1912	1900
Total	$187,739	88,517
Real property and improvements taxed	98,362	46,324
Real property and improvements exempt	12,313	6,212
Live stock	6,238	3,306
Farm implements and machinery	1,368	749
Manufacturing machinery, tools, and implements	6,091	2,541
Gold and silver coin and bullion	2,616	1,677
Railroads and their equipment	16,148	9,035
Street railways, etc.:		
Street railways	4,596	1,576
Telegraph systems [1]	223	211
Telephone systems	1,081	400
Pullman and cars not owned by railroads	123	98
Shipping and canals	1,491	537
Irrigation enterprises	360	....
Privately owned waterworks	290	267
Privately owned central electric light and power stations	2,098	402
All other:		
Agricultural products	5,240	1,455
Manufactured products	14,693	6,087
Imported merchandise	826	424
Mining products	815	326
Clothing and personal adornments	4,295	2,000
Furniture, carriages, and kindred property	8,463	4,880

[1] Includes wireless systems.

Estimated wealth of different countries. — Owing to the insufficiency of official and trustworthy data pertaining to the subject, it has been impossible to prepare a summary of the aggregate wealth of all nations. The following statement summarizes the information concerning the wealth of the principal nations as it has been assembled by Augustus D. Webb, Fellow of the Royal Statistical Society, and published in "The New Dictionary of Statistics" for 1911. The authority referred to gives the values in pounds sterling. The reduction to dollars is at the rate of $4.8665 per pound sterling. It will be observed that the figures for the United States are those compiled by the Bureau of the Census for the year 1904. The data presented are far from comparable because of the difference in dates for which the estimates were made and the character of the data included. . . .

Country	Year	Character of data	Amount
United States	1904	Total wealth	$107,104,192,410
British Empire	1903	Total wealth	108,279,625,000
United Kingdom	1903	Total wealth	72,997,500,000
Canada	1903	Total wealth	6,569,775,000
Australasia	1903	Total wealth	5,353,150,000
India	1903	Total wealth	14,599,500,000
South Africa	1903	Total wealth	2,919,900,000
Remainder of Empire	1903	Total wealth	5,839,800,000
France	(1)	Private wealth	46,798,500,000
Denmark	1900	Total wealth	1,946,600,000
Germany	1908	Total wealth	77,864,000,000
Australia	1903	Private wealth	4,578,903,000
New Zealand	1905	Public and private wealth	1,605,945,000
Cape of Good Hope	1907	Fixed property	428,939,492

[1] "Recently."

II. Distribution of Wealth

A. *Labor's Share in the Net Product of Industry, 1850–1880* [1]

It is not enough to show that there has been an increase of wealth in the United States during the past half-century. Even more important from a social point of view is the answer to the question, "Who gets this wealth?" An effort was made to answer this question in an early report of the Massachusetts bureau of statistics of labor, by Carroll D. Wright, who afterwards became the United States commissioner of labor. Mr. Wright concludes that as a result of the improvements in machinery the relative share of labor in the net product of industry has declined from 51 per cent in 1850 to 48.1 per cent in 1880.

Net product, or value of product remaining after deducting value of raw materials of manufacture, represents the direct result of the productive forces in the given industry; or, in other words, it represents the value created over and above the value of raw materials by the effective operation of labor and capital united.

The value of net product forms, as we have said, a fund divisible into interest on capital, interest on loans, insurance, freights, rents, commissions, wages, and profits. Now if the relative share paid to

[1] *History of Wages and Prices in Massachusetts: 1752–1883.* Sixteenth Annual Report of the Massachusetts Bureau of Statistics of Labor, Parts III and IV (Boston, 1885), 34–36.

labor in the form of wages is decreased, it is, of course, obvious that the share remaining for the other purposes mentioned is increased. If capital is also relatively decreased, then it is fair to suppose that the share chargeable to interest is also diminished. It is well known that the relative cost of freights and insurance has decreased. Allowing, then, for a possible increase in rents and commissions, it would seem probable that, in the industries last examined, the share drawn out as profits has relatively increased, though such an assumption is perhaps unwarranted in the absence of definite data. It is, however, clearly inferential from the tables.

It is well established that the proportionate cost of labor in the finished fabric has been greatly reduced through the use of machinery. This reduction of actual labor cost has been an important element in reducing the price of product to the consumer, while permitting at the same time a liberal increase of wages to the laborer. An examination of these two tables would, we think, lead to the conclusion that although in every case money wages have considerably increased, yet in certain industries in which the principles of the factory system (i.e., sub-division of labor, co-ordination of processes, and the application of a series of mutually dependent and practically automatic machines) have been most effective, such, for instance, as in the cotton and woollen industries, the relative share of net product gained by the workman tends to decrease. That is to say, in these industries perfection of machines and processes constantly tends to create a larger product with less capital, and the ratio of increase in productive capacity tends to outrun the ratio of increase in wages, so that of this larger product labor obtains a less relative share, although it is produced at less expenditure of time and effort, and rewarded by a constantly increasing wage.

From the following presentation which exhibits the same data for all the industries in the United States, for 1850 and 1880, it appears that, when the field is broadened so as to include the entire manufacturing industries of the country, labor's share of net product has declined from 51 to 48.1 per cent. This slight decrease, however, is more than offset by the relative increase in capital.

It appears probable, then, that when all industries are considered money wages have not only increased, but that a slight increase has also taken place in the relative share of net product secured by labor after payment of interest on capital invested.

Ratio of Wages to Net Product: 1850 and 1880

The United States	Average wages 1850	Average wages 1880	Percentage of net product paid as wages 1850	Percentage of net product paid as wages 1880
All industries.....	$247.11	$346.91	51	48.1

Ratio of Capital to Net Product: 1850 and 1880

The United States	Amount of capital per dollar of net product 1850	Amount of capital per dollar of net product 1880	Percentage of increase
All industries.....	$1.15	$1.41	22.6

B. *Profits and Wages, 1890–1900* [1]

The same problem that was discussed in the previous extract was taken up by the Industrial Commission of 1898. The figures given as to the relative share of labor in the net product of industry show a further decline since 1880. In 1890 it was 44.9 per cent and in 1900 it had fallen to 41 per cent. The decade 1890–1900 had also witnessed a decrease in actual wages, so that the lot of labor was absolutely as well as relatively worse at the end than it had been at the beginning of this period. On the other hand the Commission points out that there has been a steady tendency for interest rates to fall during the previous thirty years. It may be said that in all points concerning labor and capital this report was very conservative.

PROFITS AND WAGES

The problem of profits and wages must be considered under two separate and wholly distinct aspects. The first question has to do with the share of the product of industry going to labor as compared with the share going to owners of capital, land, monopolies, etc. The second question — an entirely different one — is that which has to do with actual income and social well-being of the manual working classes. That the two problems are quite separate may be shown from

[1] *Final Report of the Industrial Commission.* Volume XIX of the Commission's Reports (Washington, 1902), 724–729.

the fact that, on the one hand, the share of the social product going to labor might be continually increasing from year to year and at the same time the actual income of the working people might be growing less, provided the aggregate product of society itself were decreasing. On the other hand, the actual income and social well-being of the working population might be on a steady increase and yet the share going to labor might be growing smaller and smaller, provided the aggregate production were increasing in greater ratio than the increase in the actual income of the working people.

UNCERTAINTY OF STATISTICS

The solution of the first of these questions, that having to do with the share of the social product going to labor, is, perhaps, the most difficult and unsatisfactory of all statistical problems. . . .

Equally misleading are the conclusions frequently drawn from the census of the United States respecting the proportion of the total product which goes to capital and labor respectively. The census of 1890, for example, estimated the value of manufactured products for the entire United States at $9,372,000,000, and the aggregate wages in the same industries at $2,283,000,000, according to which it would appear that labor received 24.36 per cent of the joint product. But this inference is manifestly wrong, since the cost of material used in manufactures was more than half the value of the product, viz., $5,162,000,000, or 55.08 per cent. Miscellaneous expenses also were 6.73 per cent of the total product. The proper method of inquiry into the proportion of the product going to labor is that which separates out the cost of material and endeavors to discover what proportion of the net product is assigned to labor. If this is done, it appears that in 1890 the net product of all manufacturing industries was $4,211,000,000, and of this net product the total wages paid would be 54 per cent instead of 24 per cent. The above figure for wages, however, includes salaried employees, officers, superintendents, firm members, and clerks. The payment to wage-earners, properly speaking (but including some overseers and foremen on salary), was $1,891,228,321, or 44.9 per cent of the value of the net product of manufacturing industry.

The complete figures for the census of manufactures of 1900 have been secured, a trifle in advance of their general publication, through the courtesy of the chief of the Division of Manufactures. The net product of manufacturing industry in the United States by the Census of 1900 was $5,669,335,584; while the wages paid (not including any

salaried officers) were $2,323,407,257, or 41 per cent of the net product. . . . There has been a decrease in the proportion of the total product going to wage-earners; while, as shown elsewhere, the absolute amount going to the wage-working class has slightly decreased per capita during the decade. Wages in 1899, the year actually covered by the census figures, had not reached a point as high as in 1900 and 1901. In a period of rising prosperity wages ordinarily advanced less rapidly than prices and profits.

EARNINGS OF CAPITAL

When we consider the entirely different problem of the increase or decrease of profits and wages over a period of years, we are met again not only by the defects of statistical inquiry, but by inherent difficulties of the problem. As regards the changes in the rates of interest and profits over a period of years, there are two entirely different questions to be considered. The first is the interest or profit received on disposable capital seeking investment in the open money markets. The second is the profits made by those enterprises which have an established existence. In the first case the rate of interest depends upon the opportunities for investment which have not yet been occupied and which may be much less profitable than those already in possession; while in the second case the rate of profit is determined for different investments by the different conditions surrounding each, especially the possession of good will, trade-marks, patent rights, and monopolies of various kinds. Monopoly privileges, for example, wherever they exist, become more and more valuable as population increases and the net returns are thereby augmented; but, at the same time, the rate of interest on disposable capital not protected by these privileges has continually declined.

As regards disposable capital, every statistical exhibit of value shows, during the past 30 or 40 years, this steady decline in the rate of interest. Here distinction should be made between call loans, loans on commercial paper, and loans on long-time securities. The interest on call loans is the interest on bankers' balances, and the rate depends largely on the temporary supply of legal tender and the condition of the Federal Treasury, whereas the interest on commercial paper and the interest received on long-time investments depends upon the general business prosperity. The following table and statistical chart exhibit in an impressive way the general decline of interest on these classes of investments. The rates on call loans and commercial paper are shown for New York City from the year 1866 to

1901, and indicate the rapid decline immediately thereafter following the year 1873, and the more gradual decline, with fluctuations dependent upon current conditions of business prosperity and depression. More stable than the rate on commercial paper is that received by insurance companies, which is shown for 30 years. Here it appears that the average rate of interest for the years from 1871 to 1875 was 6.88 per cent, whereas for the 7 years from 1891 to 1897 it was 4.98 per cent. . . .

The rates of interest quoted are, as already stated, those received on disposable capital which is open to competition and does not possess any special privileges or advantages protecting it from competitors. When it is attempted to discover the rate of profit received on capital invested in business, an insurmountable difficulty is presented in all industries except one, namely national banks. . . . While the banking business fluctuates with the general conditions of industry, it is, of course, impossible to draw conclusions from the history of this one business which shall apply to others respecting the rate of profits.

C. *The Growth of Large Fortunes, 1915* [1]

A very different answer to the question as to the actual distribution of wealth was given in the report of the Commission on Industrial Relations in 1915. According to this report most of the wealth is going, not to the workers, but to a small group of rich men, in whose huge fortunes is concentrated an ever-increasing proportion of the national wealth. This report is in striking contrast with that of the earlier Industrial Commission of 1898, and is decidedly radical in its tone and recommendations.

. . . What do the millions get for their toil, for their skill, for the risk of life and limb? That is the question to be faced in an industrial nation, for these millions are the backbone and sinew of the State, in peace or in war.

First, with regard to the adult workmen, the fathers and potential fathers, from whose earnings, according to the "American standard," the support of the family is supposed to be derived.

Between one-fourth and one-third of the male workers 18 years of age and over, in factories and mines, earn less than $10 per week; from two-thirds to three-fourths earn less than $15, and only about one-tenth earn more than $20 a week. This does not take into consideration lost working time for any cause.

Next are the women, the most portentously growing factor in the

[1] *Final Report of the Commission on Industrial Relations* (Washington, 1915), 25–27.

labor force, whose wages are important, not only for their own support or as the supplement of the meager earnings of their fathers and husbands, but because, through the force of competition in a rapidly extending field, they threaten the whole basis of the wage scale. From two-thirds to three-fourths of the women workers in factories, stores and laundries, and in industrial occupations generally, work at wages of less than $8 a week. Approximately one-fifth earn less than $4 and nearly one-half earn less than $6 a week. . . .

Last of all are the children, for whose petty addition to the stream of production the Nation is paying a heavy toll in ignorance, deformity of body or mind, and premature old age. . . .

This is the condition at one end of the social scale. What is at the other?

Massed in millions, at the other end of the social scale, are fortunes of a size never before dreamed of, whose very owners do not know the extent nor, without the aid of an intelligent clerk, even the sources, of their incomes. Incapable of being spent in any legitimate manner, these fortunes are burdens, which can only be squandered, hoarded, put into so-called "benefactions" which for the most part constitute a menace to the State, or put back into the industrial machine to pile up ever-increasing mountains of gold.

In many cases, no doubt, these huge fortunes have come in whole or in part as the rich reward of exceptional service. None would deny or envy him who has performed such service the richest of rewards, although one may question the ideals of a nation which rewards exceptional service only by burdensome fortunes. But such reward can be claimed as a right only by those who have performed service, not by those who through relationship or mere parasitism chance to be designated as heirs. Legal right, of course, they have by virtue of the law of inheritance, which, however, runs counter to the whole theory of American society and which was adopted, with important variations, from the English law, without any conception of its ultimate results and apparently with the idea that it would prevent exactly the condition which has arisen. In effect the American law of inheritance is as efficient for the establishment and maintenance of families as is the English law, which has bulwarked the British aristocracy through the centuries. Every year, indeed, sees this tendency increase, as the creation of "estates in trust" secures the ends which might be more simply reached if there were no prohibition of "entail." According to the income tax returns for ten months of 1914, there are in the United States 1598 fortunes yielding an income

of $100,000 or more per year. Practically all of these fortunes are so invested and hedged about with restrictions upon expenditure that they are, to all intents and purposes, perpetuities.

An analysis of 50 of the largest American fortunes shows that nearly one-half have already passed to the control of heirs or to trustees (their vice regents) and that the remainder will pass to the control of heirs within twenty years, upon the deaths of the "founders." Already, indeed, these founders have almost without exception retired from active service, leaving the management ostensibly to their heirs but actually to executive officials upon salary.

We have, according to the income tax returns, forty-four families with incomes of $1,000,000 or more,[1] whose members perform little or no useful service, but whose aggregate incomes, totalling at the very least fifty millions per year, are equivalent to the earnings of 100,000 wage earners at the average rate of $500.

The ownership of wealth in the United States has become concentrated to a degree which is difficult to grasp. The recently published researches of a statistician of conservative views[2] have shown that as nearly as can be estimated the distribution of wealth in the United States is as follows:

The "Rich," 2 per cent of the people, own 60 per cent of the wealth.

The "Middle Class," 33 per cent of the people, own 35 per cent of the wealth.

The "Poor," 65 per cent of the people, own 5 per cent of the wealth.

This means in brief that a little less than two million people, who would make up a city smaller than Chicago, own 20 per cent more of the Nation's wealth than all the other ninety millions.

The figures also show that with a reasonably equitable division of wealth, the entire population should occupy the position of comfort and security which we characterize as Middle Class.

D. *Distribution of the National Income, 1850–1910*[3]

The most careful and comprehensive study yet made of the distribution of the wealth and income of the people of the United States among the different factors of production is the book by Dr. King, from which this extract is taken. This

[1] The income tax statistics, as a matter of fact, cover only a period of ten months in 1914.

[2] Professor Willford I. King, *The Wealth and Income of the People of the United States.*

[3] *The Wealth and Income of the People of the United States.* By Willford I. King (New York, 1915), 154–172, *passim.* Printed by permission of the author and the publishers, The Macmillan Company.

temperate and judicious study concludes that all the factors have shared in the increase in wealth, while the technical improvements and consequent increase of production of the past half-century have resulted in a great increase in the purchasing power of the earnings of all classes.

It is evident that the economic welfare of the individuals composing each group or class will depend upon three things: first, the size of the stream; second, the share going to the group or class; third, the number of persons within the class among which the share is to be divided. Any study, then, of the relative progress of any segment of the population involves a consideration of these three points. . . .

Rent has been estimated as a percentage of the value of the land. This involves an error in that it fails to account for the fact that land value represents the total present worth of future as well as of present rentals, and so takes account of increases in the rent which are expected to occur later. In a new country, where steadily rising rents are normally anticipated, the value of land is considerably greater than that obtained by capitalizing the present rent at current interest rates. An attempt has been made to offset any error from this source by using the low rate of four per cent of the value as an estimate of the rent of the land.

In computing the share of interest, the rates have been taken as from six to eight per cent of the estimated value of existing capital goods. Since there is no uniformity in the Census reports concerning the things classed as capital, the estimate of the total value of capital goods is necessarily a very crude one.

The remainder of the total product has been entered under the head of profits. The author realizes that some economists would prefer to class monopoly gains with rent but it was not feasible to do so in this case, even if such a course were desirable.

To sum up, it is believed that the share of wages is rather accurately set apart, that the share of rent is close enough to the reality to answer some of the questions commonly asked about it, and that the division of the remainder of the total net product between interest and profits, though admittedly very inaccurate, yet is as close to the facts as can easily be estimated from the Census material and indicates the truth in a broad way. The general estimates appear in Table XXX and the salient features are brought out by Fig. 18.

TABLE XXX

THE ESTIMATED TOTAL NATIONAL INCOME FOR THE CONTINENTAL UNITED STATES DIVIDED INTO RENT, INTEREST, PROFITS, AND RETURNS TO EMPLOYEES

Census Year	Amount in Millions of Dollars [2]					Price Index [1]
	Total	Wages and Salaries [3]	Interest	Rent	Profits	
1850	2,213.8	792.8	276.5	170.6	973.9	139.2
1860	3,635.6	1,351.1	532.6	321.2	1,430.7	141.3
1870	6,720.1	3,269.5	864.5	463.2	2,122.9	221.6
1880	7,390.7	3,803.6	1,373.2	642.3	1,571.6	132.4
1890	12,081.6	6,461.8	1,738.9	913.8	2,967.1	113.6
1900	17,964.5	8,490.7	2,695.7	1,396.0	5,382.1	101.7
1910	30,529.5	14,303.6	5,143.9	2,673.9	8,408.1	126.5

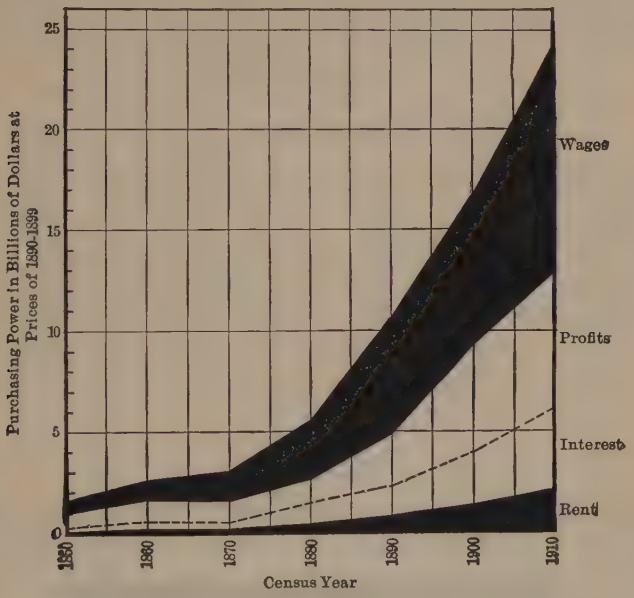
Census Year	Purchasing Power, Base, 1890–1899				
	Total	Wages and Salaries	Interest	Rent	Profits
1850	1,590.5	569.6	198.6	122.6	699.7
1860	2,572.8	956.2	376.9	227.3	1,012.4
1870	3,032.4	1,475.3	390.1	209.0	958.0
1880	5,582.3	2,873.0	1,037.2	485.1	1,187.0
1890	10,635.5	5,688.2	1,530.9	804.4	2,612.0
1900	17,665.9	8,349.6	2,650.9	1,372.9	5,292.5
1910	24,137.0	11,309.9	4,066.4	2,113.8	6,646.9

[1] Wholesale prices for year preceding the census. *Bulletin 114 of the United States Bureau of Labor Statistics*, p. 149.

[2] The figures for wages and salaries are believed to be fairly accurate; those for rent are thought to have an error of not more than twenty per cent. The separation of the share of capital from that of the entrepreneur is very crudely done and no stress should be laid on the results. The total for all shares is thought to be more accurate than the mode of distribution and, for the last three census years, should come within ten per cent of the correct statement of the national

FIGURE 18

ESTIMATED DISTRIBUTION OF THE NATIONAL INCOME FOR THE CONTINENTAL UNITED STATES AMONG THE FACTORS OF PRODUCTION



But, after all, absolute figures are of but little interest to most of us. Fig. 18 shows that all the shares have greatly increased; but we have known that already. Which has been gaining at the expense of the others? Which has been losing out in the race? The answer to these questions is presented in Table XXXI and Fig. 19.

. . . We have observed that labor has been fairly successful in retaining about a half of the total product, but this tells us nothing about the portion going to each individual and the last is a question

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income. For earlier years, the error should not be over twenty per cent at the outside.

[3] Wages and salaries were independently estimated, also, by the method of multiplying the estimated number employed by the average wage received. The variations for the different years between the respective results of the different methods are as follows: 1850 — 4 per cent; 1860 — 5 per cent; 1870 — 5 per cent; 1880 — 7 per cent; 1890 — 1 per cent; 1900 — 2 per cent, showing the improving accuracy of recent figures.

TABLE XXXI

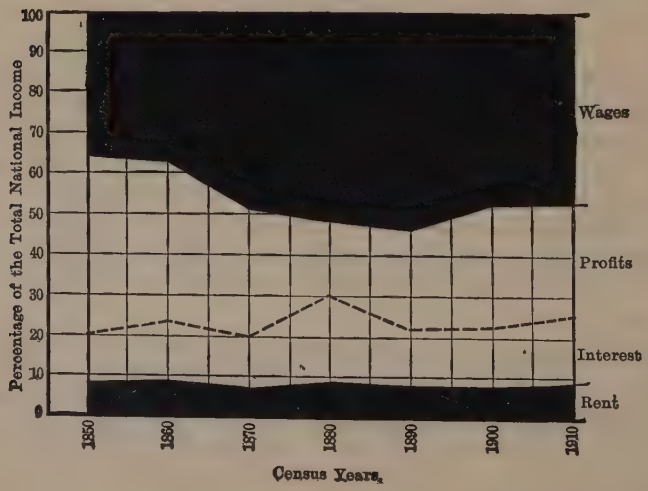
THE ESTIMATED PERCENTAGES OF THE TOTAL NATIONAL INCOME RECEIVED RESPECTIVELY BY LABOR, CAPITAL, LAND, AND THE ENTREPRENEUR

Census Year	Shares of Product [1]				
	Wages and Salaries	Interest	Rent	Profits	Total
1850	35.8	12.5	7.7	44.0	100.0
1860	37.2	14.7	8.8	39.3	100.0
1870	48.6	12.9	6.9	31.6	100.0
1880	51.5	18.6	8.7	21.3	100.1
1890	53.5	14.4	7.6	24.6	100.1
1900	47.3	15.0	7.8	30.0	100.1
1910	46.9	16.8	8.8	27.5	100.0

[1] Computed from Table XXX.

FIGURE 19

ESTIMATED RELATIVE SHARES OF THE DIFFERENT FACTORS OF PRODUCTION IN THE NATIONAL INCOME FOR THE CONTINENTAL UNITED STATES



of vastly more importance than the study of the share obtained by labor *en masse*. Has the compensation for the efforts of the average laborer increased as fast as should be the case considering the tremendous improvements in industrial processes? Has the entrepreneur distanced the employee in the race, constantly securing the lion's share of the added spoils? Some light will be thrown upon these questions by reference to Table XXXII. . . .

TABLE XXXII

THE ESTIMATED RETURNS FOR PERSONAL EFFORTS IN THE CONTINENTAL UNITED STATES

Census Year	Average money wage per employee per annum	Average wage per employee in purchasing power [1]	Average money profits in dollars per entrepreneur	Average profits per entrepreneur in purchasing power [2]
1850	$204	$147	$443	$318
1860	265	188	454	321
1870	397	179	497	224
1880	323	244	281	212
1890	398	350	418	368
1900	417	410	617	607
1910	507	401	899	711

Throughout the half century, the earnings, measured in commodities, of the average employee showed a most gratifying increase, practically trebling in the five decades. Even the depression, caused by the great monetary expansion and the consequent high prices of the Civil War period, was almost overcome by 1869 and, from that date on, each decade marked a striking advance.

III. How the National Wealth is Expended

A. *Advance in the Standard of Living, 1910* [3]

It is a matter of common observation that the standard of living of modern society has advanced far beyond that set by our ancestors of fifty or a hundred years ago. The way in which the demand for even the primary necessities of life, as food, shelter, clothing, education, and social intercourse, has been changed in character as a result of higher standards of living, is here analyzed.

[1] Purchasing power of the money wage at the prices of 1890–1899.

[2] Purchasing power of the money profits at the prices of 1890–1899.

[3] *Report of the [Massachusetts] Commission on the Cost of Living.* (Boston, 1910), 494–496.

The general advance of the standard of living throughout all the ranks of the population, from the highest to the lowest, is manifestly one of the most potent causes of the increase of the demand for commodities, and consequently of the advance of prices. On every side the wants of the people have been multiplied and diversified. They demand more and better things. Their requirements are larger, more varied and more exacting. The growth of the cities, the cult of fashion, the increase of leisure and numberless factors have combined to bring about this advance of living standards. In itself, the improvement of the standard of living is a sign of cultural progress, to be welcomed and encouraged. Rational extension and diversification of consumption is highly desirable. When, however, the change proceeds so rapidly as during the last decade, it accelerates greatly the upward movement of prices. The resulting increase of the cost of living is likely under these circumstances to produce a reactionary effect on the standard of living, causing the consumers to curtail expenditures, and thus to abandon the gains that have been briefly won. In short, the advance of the standard of living, if not rationally guided and safeguarded, threatens to bring about a later decline of the standard to a lower level.

The various factors entering into the advance of the standard of living have been admirably analyzed by Marcus M. Marks. He points out the extension of the consumer's requirements with reference to the five necessities of civilized existence, — food, shelter, clothing, education and society, — as follows:

1. *Food.* — Finer and more varied food than heretofore is now generally demanded by the workingman, on account of an educated taste, and also, perhaps, because of the more general publicity as to what is consumed by the other classes. The result is an increased demand, which advances prices.

2. *Shelter.* — The standards of home conditions as to sanitation, light, air and comfort have steadily advanced, until, as a result, more, larger and costlier buildings are required to house the same number of people, with a corresponding increase in rent. This creates a larger demand for building materials and labor.

3. *Clothing.* — In former days garments were often worn until the color changed and the cloth became threadbare; nowadays the workingman discards clothing long before these conditions appear. Style has become more imperious and fashions more fickle. As is the case in the improvement of homes, so, naturally, the larger demand for clothing vastly increases the demand for materials and labor.

The resulting scarcity of wool, for example, has greatly advanced its market price.

4. *Education.* — The present broader and more general education, even though free from direct expense to the workingman, adds to his cost of living by refining his tastes and increasing his desires. For example, the purchase of a morning paper is now his regular habit; an evening paper almost equally so; popular books and magazines are included in the necessities of life; furthermore, life insurance premiums and many other expenses incident to present-day enlightenment are added to the cost of the workingman's living.

5. *Society.* — Finally, the desire for social intercourse, greater in this day of general co-operation and interdependence than ever before, again adds to the list of necessary expenses; there are many outlays incident to going about and mingling with one's fellows which need not be here detailed, but must be added to the cost of what is now included in true living. . . .

B. *How Much is Enough? 1907* [1]

Thus far the questions to which answers have been given are questions of fact: What is the national income and how is it distributed among the different factors of production? Here a question is raised as to what ought to be. What is a fair living wage for the workers in our factories and mercantile establishments? Do actual wages come up to this ideal standard? Numerous studies have been made of the cost of living as shown in workingmen's budgets in an effort to discover the necessary minimum for a thrifty and self-respecting family. The following extract is taken from a careful study of this kind.

What, then, is a "fair living wage" for an average family? A number of careful estimates have been made in answer to this question. The Massachusetts Bureau of Statistics puts it at $724. a year for a family of five; the New York Bureau of Labor at $520.; Mr. John Mitchell, President of the United Mine Workers of America, at $600.; Mr. Robert Hunter, author of "Poverty," says $460. (for actual and necessary expenses); and Dr. Edward T. Devine, Secretary of the Charity Organization Society of New York City, estimates $600. as a minimum. These estimates were all made at periods of lower prices and cost of living than the present (1906).

A "fair living wage" should be large enough not only to cover expenses which Mr. Rowntree calls "necessary for maintaining

[1] *Wage-earners' Budgets.* By Louise B. More (New York, 1907), 268–270. Printed with the permission of the author and of the publisher, Henry Holt and Company.

merely physical efficiency," but it should allow for some recreation and a few pleasures, for sickness, short periods of unemployment, and some provision for the future in the form of savings, insurance, or membership in benefit societies.

The whole question of a fair wage depends primarily on the amount and cost of food necessary for proper nutrition. If a man is underfed, he must underwork, as Mr. Rowntree says; his children are stunted in growth and intellect, and when a man is unfit for work he fails to get it or works for the lowest wages. Mr. Rowntree adds: "The most hopeless condition of the poor, as every social worker knows, is unfitness for work. Unfitness for work means low wages, low wages mean insufficient food, insufficient food means unfitness for labor, and so the vicious circle is complete." [1]

This investigation has shown that a well-nourished family of five in a city neighborhood needed at least $6. a week for food. The average for 39 families, having five in a family, was $327.24 a year for food. If we consider $6. a week (or $312. a year) as 43.4 per cent of the total expenditure (which was the average percentage expended for food in these 200 families, and very near the average for the workingmen's families in the extensive investigation of the Department of Labor), the total expenditures would be about $720. a year. It therefore seems a conservative conclusion to draw from this study that a "fair living wage" for a workingman's family of average size in New York City should be *at least* $728. a year, or a steady income of $14. a week. Making allowance for a larger proportion of surplus than was found in these families, which is necessary to provide adequately for the future, the income should be somewhat larger than this — that is, from $800. to $900. a year.

In conclusion, the fact that the "plane" or condition of living which is sometimes forced upon a family by stress of economic circumstances does not necessarily reflect the standard of living of that family, should be emphasized. The "standard of living" is a relative phrase, depending not only upon the amount of income, price of commodities, rent, and other *facts*, but also upon the attitude of each family toward life. This standard also varies greatly according to extravagance or thrift, wasteful expenditures or intelligent household economy. From an economic standpoint, however, the amount of income is the most important factor in determining the standard of comfort attainable in an average workingman's family.

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[1] Rowntree, "Poverty," p. 46.

C. *The Needs of a Self-supporting Woman, 1914*[1]

The results of a careful investigation by the Minimum Wage Commission of Massachusetts are presented briefly in the following extract. According to their findings the lowest wage upon which a normal self-supporting woman could live in Boston was $8.00 a week, a sum which was greater than that actually earned by many workers in the brush industry. This conclusion is a partial answer to the question raised in the preceding extract as to how much is enough.

A summary of the findings of the commission for the brush industry is given in the first annual report of the commission, published in January, 1914. As stated in this report, it was found that almost exactly two-thirds of the brush workers for whom wage records were available received an average of less than $6 a week. At the conclusion of this study of the brush industry, the commission was convinced that the wages paid to a substantial number of the female employees in that industry were inadequate to supply the necessary cost of living and maintain the worker in health, and a wage board for that industry was therefore established. . . . With regard to the needs of the employees, the following statements are made in the report of the Brush Makers' Wage Board to the Minimum Wage Commission, March 17, 1914, as summarized in Bulletin No. 3 of the commission:

Lodging at the lowest level of decency cannot be found in Boston for less than $1.50 per week. A minimum cost for food is at least $3 a week. If one has the courage to go little beyond keeping warm and dry, it cannot be done for less than $45 a year, or 87 cents a week. For the preservation of health, average expenditures of $8.75 per year, or 17 cents a week, seem an irreducible minimum. Car fare requires at least 60 cents a week. The total budget so built up is:

	Per week
Lodging	$1.50
Food	3.00
Clothing	.87
Car fare	.60
Other	.17
Total	$6.14

This figure assumes ideal conditions, and is purely theoretical. It allows nothing for laundry, for reading other than in public libraries, for recreation, for church, for savings or for insurance of any kind.

At least these items must be added:

[1] *Second Annual Report of the Minimum Wage Commission of Massachusetts* (Boston, 1915), 8–9.

	Per week
Laundry	$0.20
Church	.10
Newspapers (Sunday and every other day)	.08
Vacation (one week per year at $10)	.19
Picture show (once in two weeks)	.05
Theatre (once in two months at 25 cents)	.04
Clothing (an addition of $25 per year)	.48
Food	.50
Lodging and extras	.50
Total	$2.14

The lowest total for human conditions for an individual in Boston is thus seen to be $8.28. This amount is lower than that of $8.71 tentatively arrived at by the board early in its proceedings. It makes no allowance for savings or insurance, and is not therefore a true living wage. Allowing for variations between individuals, the wage board is convinced that the sum required to keep alive and in health a completely self-supporting woman in Boston is in no case less than $8, and in many cases may rise to $9 or more.

D. *Making Ends Meet, 1903*[1]

Two investigations have been made by the United States Commissioner of Labor into the cost of living, the first in 1891 and a second more comprehensive one in 1903. From the second of these is given a short extract showing the extent to which wage-earners were able to adjust their expenditures to their incomes, and how they disposed of the surplus or met the deficit at the end of the year. As these conclusions were based upon a study of 25,440 families living in 33 states, they may be regarded as fairly representative of American conditions. This investigation is probably the most comprehensive of its kind ever made. With this reading should be compared extracts H and I of Part III of the previous chapter.

. . . The total income per family for the 25,440 families covered by this inquiry was $749.50. . . .

The total expenditure per family for all purposes was $699.24. . . .

The average income for the year of the 25,440 families exceeded their average expenditure by $50.26. This does not take into consideration payments made during the year on the principal of mortgages upon homes, which, if distributed among all families would show an increase in average savings of about $7. . . .

A surplus at the end of the year was reported by 12,816 families or about one-half of the whole number of families. The average

[1] *Eighteenth Annual Report of the Commissioner of Labor.* (Washington, 1904), 57, 60–1, 89.

surplus for these families was $120.84. A deficit was reported by 4,117 families, the average deficit for these families being $65.58. Of the total there remained 8,507 families, and these reported that they came out even at the end of the year; that is, that as nearly as they could account for their income and expenditure, they had used up all they had earned or otherwise obtained during the year. This report does not pretend to show the assets and liabilities of the families at the end of the year. Probably few families would show a balance sheet exactly like that of the preceding year. Presumably many of these families went forward or backward at least a little in their assets; they most likely had more or less of furniture, clothing, fuel, and food on hand than at the close of the preceding year.

The largest precentage of families having a surplus was in the State of Washington, where 90.50 per cent reported a surplus. Except in the States of Kentucky, Maryland, and Tennessee there were more families reporting a surplus than families reporting a deficit. . . .

Of the total 2,567 families which reported their income and expenditure in detail, 1,480 families had a surplus, 507 families had a deficit, and 580 families reported that they came out even at the end of the year — that is, their expenditure equalled their income.

Of the families reporting a surplus, 491 had the surplus on hand in cash, 682 had deposited the surplus in bank, 63 had placed it in building associations, 42 had invested it in real estate, 5 had invested it in shares of stock, 3 had loaned it, 60 had paid preexisting debts with it, 1 had disposed of it in some other way, and 133 made no report as to what they had done with the surplus. Many of the families that had put money into bank or had invested it in some way also had more or less cash left on hand. . . . Seventy-nine of the 1,480 families which reported a surplus had also made payments on the principal of the incumbrance on the home.

Of the 507 families which reported a deficit for the year, 244 had met the deficit by obtaining credit, 94 had drawn on former savings, 1 had mortgaged real estate, 2 had mortgaged furniture, 1 had sold real estate, 13 had borrowed money, 2 had met the deficit in other ways, and 150 made no report as to the method of meeting the deficit. Nineteen of the families which reported a deficit for the year had made payments on the principal of the incumbrance on the home.

Of the 580 families which used up their whole income during the year, 22 had in reality saved some money by making a payment on the debt on the home.

E. *Extravagance and Waste, 1910* [1]

The existence of a deficit in the wage-earner's budget may be due to the insufficiency of his income, but it may also be due to unwise expenditure or to downright waste. Some of the principal items in which individual extravagance or waste may take place are described in the following extract. This is the dark side of the picture.

INDIVIDUAL WASTAGE

A. Drink

It has long been known that the excessive use of alcoholic liquor is a menace to the happiness and an injury to the welfare of those peoples among whom it is prevalent, but not until the science of statistics was applied to the problem was the magnitude of its economic importance appreciated. Of late we have come to know that by sapping vitality, by bringing accident, disease and death, it causes economic waste of enormous proportions. . . .

The economic effect of all this shows itself in two directions: first, in the expense entailed on the community in costs of government and charity; and second, in the injury to the productive efficiency of the community. . . .

The use of alcoholic beverages in this country has rapidly increased. That of distilled spirits remains about stationary, the average retained here for consumption having been 1.45 gallons per capita in the years 1871–78, and the same in the years 1901–08; but the average for malt liquors in the same periods rose from 6.72 gallons a year to 18.88 gallons. In 1908 it was 20.97 gallons.

Observation leads us to believe that there has been in Massachusetts a material diminution of public drinking by the well-to-do in the last generation, with less use of wine at banquets, of punch at college reunions, less resort by business men to public bars, less consumption of hard liquors in clubs. But the statistics indicate that there must have been great increase in the use of malt liquors in homes, and of resort to saloons by wage earners.

With the spread of education and the general progress of society, there ought to be a lessening of the evils produced from such a cause as this. We are not of the belief that the primary cure is to be found in legislation. Men cannot be made good by law. The most important thing is to elevate the standards of the community, for its

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[1] *Report of the Massachusetts Commission on the Cost of Living.* (Boston, 1910), 239–51.

moral sense is the most powerful of all agencies. But the strong arm of the law often has to be called upon to enforce the common will. . . .

Per Capita Consumption of Alcoholic Beverages in the United States

Year	Wines (gallons)	Malt Liquors (gallons)	Spirits (Proof gallons)	Total wines, malt liquors and spirits (gallons)
1840	.29	1.36	2.52	4.17
1850	.27	1.58	2.23	4.08
1860	.35	3.22	2.86	6.43
1870	.32	5.31	2.07	7.70
1880	.56	8.26	1.27	10.08
1890	.46	13.67	1.40	15.53
1900	.39	16.02	1.28	17.69
1908	.60	20.97	1.44	23.01

Per Capita Consumption of Alcoholic Beverages in other Countries, 1902

Countries	Wines (gallons)	Beer (gallons)	Spirits (gallons)
France	24.00	4.80	1.43
German Empire	1.14	25.50	1.85
Italy	27.00	.16	1.27
Australian Commonwealth	1.11	12.40	.85
United Kingdom	.36	30.30	1.05
Canada	.09	5.10	.80

B. Luxury

The recent period of rising prices has been marked by a tendency toward extravagance among all classes, never before shown in this country. . . .

In the twelve years since the use of self-propelled road vehicles became mechanically perfected and commercially profitable, it is estimated that a million automobiles have been produced, and sold for more than a billion and a half dollars. In this production France, until 1907, led the world, when it was passed by the United States,

which is now in the lead. The production of automobiles in the United States this year will easily approximate $250,000,000. The great bulk of this output represents pure luxury production, which has taken at least 100,000 workers out of employments in which they were producing commodities that were useful and of benefit to all the people, into an occupation in which the product may be termed an economic waste. . . .

The progress of civilization has demonstrated that the luxuries of to-day are considered the necessities of to-morrow. The production of automobiles for commercially economical and purely pleasurable purposes is not likely to diminish, but rather to increase. Yet it must be said that the present tendency toward luxury production entails a penalty that must be paid by the whole community in an advance of the prices of the necessary things of life. Three hundred years ago an English writer said that such luxury "hath honey in her mouth, gall in her heart, and a sting in her tail"; and in this age the tendency toward universal extravagance, pleasant as its approaches are, and greatly as it throws its gilded charms on the world, may enslave men more than the most active vices.

C. Amusement

In considering the subject of amusement, among the many phases of social and individual waste, the character and value of amusement as an aid to individual and economic efficiency must be reckoned with and estimated. . . .

. . . To put the matter in the proverbial phraseology of the race, which expresses a homely wisdom gathered in the experience of the ages, "All work and no play make Jack a dull boy." Relaxation from labor is not in itself enough to compensate man for the physical exhaustion and waste incident to daily work. The mere resting of muscle and brain must be supplemented by some form of amusement, some pleasure, which makes the worker forget the sweat and fret of the day, and carries him into imaginary regions and conditions where labor and its exhaustion are forgotten. . . .

The increase in the number of theaters and show houses from 75 in 1900 to 242 in 1910 indicates a growth vastly out of proportion to the growth of population in this Commonwealth, and a tendency to extravagance. . . . In 1910 we find only 50 theaters and houses devoted to drama and vaudeville, while 192 are given over to "moving pictures" and cheaper forms of vaudeville. . . .

It should be observed, furthermore, that the increase in the number

of "motion-picture" houses is largely in cities and towns devoted to factory industries, and they furnish amusement to classes of workers whose means debar them from theaters of the higher class, except on rare occasions. It is worthy of note that wherever the "motion-picture" houses are opened, the patronage of the liquor saloons in the neighborhood shows a falling off; . . . But, when all possible allowance has been made on these grounds, it is clear that the enormous increase of the number of theaters and amusement places and of the attendance during recent years marks an abnormal development of the appetite for amusements, and represents a considerable squandering of income. . . .

It is impossible to estimate the amount wasted on amusements; the line between economic and uneconomic expenditure on this score is so vague that a curve of waste cannot be plotted. . . . That a deal of waste is now taking place in the form of excessive and demoralizing expenditure for amusements we believe, however, to be a fact patent to any impartial observer. This waste is twofold. It involves the unprofitable spending of money which might otherwise have been devoted to forms of consumption that would heighten efficiency, or to assistance in the production of useful commodities, and it diminishes the industrial efficiency and consequently the output of the working population. . . .

D. Domestic Waste

Domestic waste may be either destruction without profitable result, or misuse, the latter taking the form of extravagance. Families with incomes below $800 a year waste very little food material. They may suffer from illness due to poor food, and thus waste income. United States government investigations show waste of edible material amounting to not more than 3 or 4 per cent. in this class. In the case of families with incomes between $1,000 and $3,000 a year, all investigations show frequent wastes of 10 to 25 per cent. of foods purchased, and extravagance in buying to an equal amount. Such families spend from $300 to $800 a year for food. If 20,000 families in Boston spend needlessly and to their own detriment $200 a year, the sum of $4,000,000 annually is involved, besides the cost of caring for garbage and loss through illness.

Food waste occurs in three principal ways:

1. Waste in marketing, including purchase of inedible material, purchase in small quantities, purchase for flavor and tenderness instead of nutrition, and sheer extravagance.

2. Waste in preparation, including preparation of too large quantity for the meal or day, food made inedible by poor cooking, and food unwholesome by wrong cooking.

3. Waste in supplies and cooked food, including garbage pure and simple, and loss in moving and closing the house for the summer, when whole packages are thrown away, etc.

IV. Saving and Thrift

A. *Savings in the United States, 1863–1913*[1]

The greatest channel for saving is undoubtedly the banks, and in the following extract figures are given of the total deposits in all banks, and in those which are especially used by the wage-earners. The statistics of the savings banks are particularly encouraging as giving evidence of a growing spirit of thrift as well as of the existence of a disposable surplus. This is the bright side of the picture.

Number of Banks and of Deposits of State, Savings, and Private Banks, Loan and Trust Companies, and National Banks, from 1863 to 1913

[*Amounts in millions of dollars*]

Year	Number of banks reporting	Individual deposits
1863	1,466	$393.7
1865	1,960	641.0
1870	2,457	1,051.3
1875	3,336	1,787.0
1880	3,355	1,951.6
1885	4,350	2,734.3
1890	7,999	4,062.5
1895	9,818	4,921.3
1900	10,382	7,238.9
1905	16,410	11,350.7
1910	23,095	15,283.4
1913	25,993	17,475.7

SAVINGS DEPOSITS IN ALL BANKS

Savings deposits are supposed to represent chiefly the accumulations of wage earners and other people of moderate means, and by reason of this fact statistics relating to such deposits are of special

[1] *Annual Report of the Comptroller of the Currency.* (Washington, 1914), 43–77, *passim.*

interest. Savings deposits in all banks of the country increased from $6,496,192,707 in June, 1912, to $6,972,069,227 in June last, the increase during the year being $475,876,520, or over 7 per cent. The aggregate deposits in all banks on June 4, 1913, roundly stated, were $17,475,700,000; of this amount $6,972,000,000, as stated, was savings deposits, exclusive of $211,445,687 held by savings banks subject to check without notice. Statistics showing the number of savings depositors in all banks for the current year are not available, but the information obtained upon this subject in 1911 showed that there were on June 7 of that year over 17,600,000 savings accounts on the books of the various banks of the country. . . .

Year	Number of banks	Number of depositors	Deposits	Average due each depositor	Average per capita in the United States
1820	10	8,635	$1,138,576	$131.86	$ .12
1825	15	16,931	2,537,082	149.84	..
1830	36	38,035	6,973,304	183.09	.54
1835	52	60,058	10,613,726	176.72	..
1840	61	78,701	14,051,520	178.54	.82
1845	70	145,206	24,506,677	168.77	..
1850	108	251,354	43,431,130	172.78	1.87
1855	215	431,602	84,290,076	195.29	....
1860	278	693,870	149,277,504	215.13	4.75
1865	317	980,844	242,619,382	247.35	....
1870	517	1,630,846	549,874,358	337.17	14.26
1875	771	2,359,864	924,037,304	391.56	....
1880	629	2,335,582	819,106,973	350.71	16.33
1885	646	3,071,495	1,095,172,147	356.56	....
1890	921	4,258,893	1,524,844,506	358.03	24.35
1895	1,017	4,875,519	1,810,597,023	371.36	25.88
1900	1,002	6,107,083	2,449,547,885	401.10	31.78
1905	1,237	7,696,229	3,261,236,119	423.74	39.17
1910	1,759	9,142,908	4,070,486,246	445.20	45.05
1913	1,978	10,766,936	4,727,403,950	439.07	48.56

BUILDING AND LOAN ASSOCIATIONS IN THE UNITED STATES

Statistics relating to the building and loan associations in the United States for the year 1912 have been obtained through the courtesy of Mr. H. F. Cellarius, secretary of the United States League of Local Building and Loan Associations.

There were in 1912 in the United States 6,273 associations, with

a total membership of 2,516,936, and having assets amounting to $1,137,600,648. The total resources increased $106,913,627, or a little over 10 per cent for the year, and the membership increased 184,107, or a little less than 8 per cent., during the same period. The average amount due each member is $451.98, an increase of $10.17 per member for the year. . . .

SCHOOL SAVINGS BANKS

Through the courtesy of Mrs. S. L. Oberholtzer, who has undertaken the work of collecting statistics relating to this class of banks, the Comptroller is enabled to present the latest statistical data showing the growth of the school savings bank system in this country. Much interest is now being manifested in this method of accumulating small savings, and recently the American Bankers' Association provided for a school savings section, in charge of a capable secretary, for the purpose of studying the growth of this movement and compiling statistics relating thereto.

From reports received and compiled it appears that there are about 1,200 schools in 201 cities and towns having school savings banks. The pupils registered at these schools number 1,492,789, and the number of pupils with savings accounts are 210,320. The total amount deposited was $4,305,018.83, withdrawn $3,143,551.22, the balance on deposit being $1,161,467.61. . . .

POSTAL SAVINGS BANKS

Number of offices and branches	Number of depositors	Deposits	Average deposit account	Average deposit per inhabitant
12,820	330,703	$33,818,870	$102.26	$0.35

B. *Building and Loan Associations, 1893*[1]

A characteristic and important savings and investment institution in the United States is the building and loan association, whose purpose is to assist the person of small means to acquire a home by loaning him the necessary capital on the security of a mortgage on the property. The following extract shows something of the financial and social importance of these associations.

[1] *Ninth Annual Report of the Commissioner of Labor.* (Washington, 1894), II, 13–15.

Building and loan associations have existed in this country since about 1840, although the first organization of the kind of which there is any record was organized at Frankford, a suburb of Philadelphia, January 3, 1831, under the title of the Oxford Provident Building Association; but the decade from 1840 to 1850 can be considered as being the real period for the permanent inception of such associations. . . .

The growth of these associations in the United States has been very rapid since 1840, and their accumulated assets have increased to an enormous amount. These private corporations, doing a semi-banking business, conducted by men not trained as bankers, offer a study in finance not equalled by any other institutions. England, France, and some other countries have kindred institutions, but nowhere have they grown to such vast proportions as in the United States.

The investigation, the results of which are now under consideration, comprehends practically all building and loan associations in the United States. An effort was made to secure the facts for these associations as they existed at the end of their respective fiscal years nearest to January 1, 1893. . . .

The number of associations considered in the preparation of the tabular statements in this report was 5,838, of which 5,598 were local and 240 national. . . .

GENERAL RESULTS FOR THE UNITED STATES

Number of associations	5,838
Total shareholders in associations reporting	1,745,725
Total dues and profits	$450,667,594
Average dues and profits per shareholder in associations reporting	$257
Average size of loans in associations reporting	$1,120
Homes acquired in associations reporting	314,755

The total dues paid in on instalment shares in force plus the profits on the same of the building and loan associations of the country, as stated, amount to $450,667,594. A business represented by this great sum, conducted quietly, with little or no advertising, and, as stated, without the experienced banker in charge, shows that the common people, in their own ways, are quite competent to take care of their savings, especially when it is known that but 35 of the associations now in existence showed a net loss at the end of their last fiscal year and that this loss amounted to only $23,332.20. . . .

V. Social Well-being

A. *Improvement of Conditions during the Nineteenth Century, 1885*[1]

The general industrial and social advance achieved in the United States during the first three quarters of the nineteenth century, in which the laboring class shared, is here set forth. While it may be acknowledged that the average worker to-day enjoys more comforts and has a higher standard of living than his grandfather or great-grandfather was able to command, this does not determine the question as to whether labor has shared equally with capital in the general advance.

During the early years of the century, then, we find little mechanical skill, and crude and imperfect machines. Muscle was essential to the workman, and what he accomplished was secured by purely manual, frequently monotonous and irksome labor, resulting in a product generally substantial, but often clumsy, and exhibiting, as a rule, little economy in the use of material or science in the adjustment of its parts. If the absence of machinery was a blessing to the laborer, then in that respect the early American artisan was in an ideal state.

HOURS OF LABOR

The hours of labor in nearly all industries were measured by the sun, from sunrise to sunset constituting the working day. Not until 1824 was the subject of shorter hours agitated, and not until 1840 were shorter hours adopted to any extent; it was several years after that date before ten hours became the rule in the mechanic trades, while in the textile industries the ten hour system is a modern innovation, as yet adopted only in Massachusetts, so far as America is concerned.

HOUSEHOLD COMFORTS POSSESSED BY THE LABORER

Laborers at the beginning of the century had few of the comforts and conveniences now common in the poorest families. China, glassware, and carpets, to say nothing of the numberless contrivances now in use for facilitating household labor, were then practically out of reach. Dwellings were warmed by open fires of wood, while churches were not warmed at all. The iron cook stove for economically and efficiently aiding the culinary operations of the family had not yet appeared. Anthracite coal, though for fifteen years in use on black-

[1] *History of Wages and Prices in Massachusetts: 1752–1883.* Sixteenth Annual Report of the Massachusetts Bureau of Statistics of Labor, Parts III and IV (Boston, 1885), 10–15.

smiths' forges in the coal region, was unavailable for household purposes, and in 1806 the first freightage of a few hundred bushels was brought down to Philadelphia, and there used experimentally with indifferent success.

The artisan's food was simple, often coarse, and in fact confined to the bare necessities of life. The wide range of products which now enrich the workingman's table, brought to him from all the markets of the world by the modern system of rapid transportation, were many of them unknown, or if known were expensive luxuries only obtainable by the favored few.

"Among the fruits and vegetables of which no one had then even heard, are cantaloupes, many varieties of peaches and pears, tomatoes and rhubarb, sweet corn, the cauliflower, the egg plant, head lettuce, and okra.

. . . . . .

"If the food of an artisan would now be thought coarse, his clothes would be thought abominable. A pair of yellow buckskin or leathern breeches, a checked shirt, a red flannel jacket, a rusty felt hat cocked up at the corners, shoes of neat's skin set off with huge buckles of brass, and a leathern apron, comprised his scanty wardrobe." [1]

The wealthy and more genteel wore silks, velvets and broadcloth of foreign manufacture, but the laboring classes were confined to coarse fabrics of home production.

EDUCATIONAL AND SOCIAL ADVANTAGES

At the beginning of the century the educational advantages surrounding the workingman were few. Although common schools were early established in Massachusetts, yet judged by modern standards they were poor indeed. Hard by the church stood the school, but hard by the school on every village green stood, through all the early years, the gallows, stocks, and whipping post, and within, the rooms were bare and unattractive, and unprovided with apparatus for aiding the teacher's work. In school government the rod played an important part. . . .

The opportunities for social enjoyment were no broader. An extensive inquiry into the social life of workingmen at the present day, undertaken by the Bureau in 1879,[2] showed the existence in Massachusetts of large numbers of social, farmers', and mechanics' clubs;

[1] McMaster. A History of the People of the United States. Vol. 1, p. 97.

[2] See Eleventh Annual Report, pp. 239–293.

base ball, rowing, and sailing clubs; secret societies offering social opportunities to members; literary and debating societies; musical societies; halls for dancing, billiard rooms, and bowling alleys, and other avenues of enjoyment practically open to all and utilized by a considerable number. A similar inquiry at any time during the first quarter of the century would have disclosed few such social institutions. The industrial population was too much diffused, the character of the labor too severe, and the hours of labor too long to permit of their existence.

It is frequently said that there were fewer class distinctions and greater social equality in early New England life than now. This is undoubtedly true if by social equality is meant equality of condition. But the same causes that have operated to separate society into classes have, as we shall show, placed at the command of the manual workman opportunities for mental growth and social enjoyment unknown to the most favored in the early days. These opportunities have become his permanent possession. They constitute his environment. In modern society not only are all classes united by ties which cannot be broken except through revolution, and each class dependent upon every other to a degree never before known, but the social privileges of the present are open to the many and can no longer be monopolized by the few.

MEANS OF TRANSPORTATION. FACILITIES POSSESSED BY THE WORKINGMAN FOR CHANGING HIS LOCATION

Transportation upon water was confined to sailing vessels, and upon land to wagons. The roads were very poor, although after 1800 the construction of turnpikes improved the means of communication between the larger towns. These were introduced by corporations, at first operated as toll roads, and finally assumed by the towns.

Canals, primitive in construction and crudely operated, were coming to be relied upon as avenues of internal commerce. These afterward reached a high point of development until superseded by the railway. Neither upon sea nor land in 1800 was steam employed in transportation. . . .

The postal service was insufficient and far from rapid, while the rates were extremely high. Nine different rates were established in 1792, varying from six cents for thirty miles to twenty-five for four hundred and fifty miles and over, and this schedule continued in force for many years. Missives were as frequently sent by private

carriers as otherwise and sometimes weeks would elapse in the transit between places no farther apart than Boston and Philadelphia. On the average each person in the country, for the period of five years ending with 1799, sent but $1\frac{4}{10}$ missives by the mails, while for the single year 1875 the average was $23\frac{1}{2}$ per person, or at the rate of $117\frac{1}{2}$ for five years, and the use of the mails has since increased, and is increasing. Nothing could better show the change in public importance of the mail service than the enormous increase here indicated.

The railroad, telegraph, and telephone are all comparatively modern inventions. By means of steam and electricity London, Liverpool, and San Francisco are to-day nearer Boston for all practical business purposes than were New York or Philadelphia at any time prior to 1820.

The comparative isolation of business centres and the lack of facilities for rapid communication between them materially affected the condition of the wage laborer. The risks of business were greater, and no industry could be considered permanent when it was impossible to forecast the state of the market; for instance, the manufacturer in Massachusetts was for weeks ignorant of affairs in centres of distribution like Philadelphia which might materially affect the price of his product. All commerce and manufacturing were then of the nature of a venture, and the labor dependent upon industrial operations thus limited remained more or less uncertain of employment.

The same conditions which prevented the free and rapid exchange of products, raised the price and limited the variety of articles for household consumption, except such supplies as eggs, corn and rye meal, etc., which could be easily and cheaply procured on the farms near the consumer; and, beyond all, the laborer could not easily change his environment. Once located it was difficult for him to remove to other industrial neighborhoods, and this frequently operated to his disadvantage by limiting his employment and reducing his wage.

WAGES, AND THE PURCHASING POWER OF MONEY

A system of barter was common in business transactions. Money was scarce and wages were frequently paid in groceries or clothing, or in orders for such commodities, the orders passing from hand to hand as currency. Of actual money the workingmen had little, and, when cash became absolutely necessary, they were often obliged to change store orders therefor at considerable discount.

Employers kept stores of groceries, clothing, boots and shoes,

hats, and particularly liquors and tobacco, and it is evident from the inspection of old account books that a liberal share of the wages of labor was paid in rum and gin.

B. *Condition of Workers, 1902*[1]

In the Fall of 1902 Mr. A. Mosely, a British manufacturer, brought a group of twenty-three English workingmen, chosen by the leading unions of England, to this country to investigate conditions of industry. On their return home, each delegate made a report, which were published in book form. The following extract is taken from the preface by Mr. Mosely.

. . . My personal conclusion is that the true-born American is a better educated, better housed, better fed, better clothed, and more energetic man than his British brother, and infinitely more sober; as a natural consequence, he is more capable of using his brains as well as his hands. Many of the men, however, holding leading positions are either English or Scotch, and the American himself is justly proud of his British descent.

One of the principal reasons why the American workman is better than the Britisher is that he has received a sounder and better education, whereby he has been more thoroughly fitted for the struggles of after life; . . .

In my previous trips to America I had been forcibly struck by the up-to-date methods of production there, both from a business standpoint and as regards the equipment of their workshops. The manufacturers there do not hesitate to put in the very latest machinery at whatever cost, and from time to time to sacrifice large sums by scrapping the old whenever improvements are brought out. One man in charge of a large department said to me: "One of the reasons of our success is the readiness of all our men to drop existing modes of production as soon as it is demonstrated that there is something better." Labour-saving machinery is widely used everywhere and is encouraged by the unions and welcomed by the men, because experience has shown them that in reality machinery is their best friend. It saves the workman enormous manual exertion, raises his wages, tends towards a higher standard of life, and, further, rather creates work than reduces the number of hands employed. . . .

My own observations lead me to believe that the average American manufacturer runs his machinery at a much higher speed than is

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[1] *Mosely Industrial Commission to the United States of America, Oct.–Dec., 1902.* Reports of the Delegates (London, 1903), 6–9, *passim.*

the usual practice in England — in other words, for "all it is worth," and the men ably second the employers' efforts in this direction. . . .

How is it that the American manufacturer can afford to pay wages 50 per cent, 100 per cent, and even more in some instances, above ours, and yet be able to compete successfully in the markets of the world? The answer is to be found in small economies such as mentioned above, which escape the ordinary eye. . . .

That the American workman earns higher wages is beyond question. As a consequence, the average married man owns the house he lives in, which not only gives him a stake in the country, but saves payment of rent, enabling him either to increase his savings or to purchase further comforts.

Food is as cheap (if not cheaper) in the United States as in England, whilst general necessaries may, I think, be put on the same level. Rent, clothes made to order, and a variety of things, including all luxuries, are considerably dearer. Luxuries, however, do not enter very much into the every day consumption of the average working man in this country, and if in the United States he can get them at all (even though he have to pay a high price for them) that is surely an advantage by comparison.

The American workman drinks but little, and his house is usually well furnished and fitted with luxuries in the way of bathrooms, laundries, hot water and heating systems, and other items mostly unknown to the British workman.

One of the points the delegates were invited to investigate was whether or not the workman in the United States "wears out" faster than the Englishman. Personally, I think not. It is generally admitted that the American workman, in consequence of labour saving machines and the excellence of the factory organisation, does not need to put forth any greater effort in his work than is the case here, if as much. . . . In American factories, speaking generally, great attention is paid to the necessities and comfort of the workers. Separate lockers (of which the workman has the key) are provided for working clothing; consequently the man can arrive at and leave his work well clad, changing at the factory. The shops are usually very well ventilated, although it is customary to keep them at a temperature many degrees above the average in this country. . . .

One point that has struck me with enormous force, as I believe it has all the delegates, is the close touch and sympathy between master and man, which is carried a step further in the enlistment of the men's good offices to improve factory methods. . . .

VI. Conservation of Resources

A. *Conservation of Natural Resources, 1909*[1]

In any estimate of the economic progress of the people of the United States we must take account of the amount and fertility of the soil, and of the stores of metallic and mineral and forest wealth at the disposal of the people, for upon these will depend in large measure their future development. It had generally been assumed that the supplies along all these lines were practically inexhaustible, but in 1908 a national commission, appointed by President Roosevelt to investigate the subject, sounded a note of warning concerning our wasteful methods and urged more careful conservation of our natural resources.

The land area of the United States, excluding Alaska and the insular possessions, is about 3,000,000 square miles, or 1,920,000,000 acres. Of this area over half is arable, and a little less than half is occupied as farm land. About one-fourth is forest and one-eighth sparse wood land and cut-over land. Two-fifths is arid or semi-arid, generally requiring irrigation; one twenty-fifth is swamp and overflow land requiring drainage. Most of the dry, wet, and sparsely wooded lands, with part of the forest area, is adapted to grazing.

About two-thirds of the land has passed into private holdings. Of the original 1,920,000,000 acres there remained July 1, 1908, 387,000,000 acres open to entry; nearly all of this is arid or otherwise unsuitable for settlement by families. There are also about 235,000,000 acres in national forests, national parks, and other lands reserved for public use. . . .

The population of the United States in 1900 was 76,303,387; probably it will double by the middle and triple before the end of the present century. In view of this growth, the question of food supply assumes the highest importance. How shall the greatly augmented demand for foodstuffs be met? Can sufficient food be obtained from our own soil or will it become necessary to import, and, if we import, how shall we find the means? . . .

Aside from the importation of foodstuffs, but one feasible way of meeting our growing demand appears — i.e., to increase our crop yields. That this is not only feasible but entirely practicable is shown by the larger yields of long-settled countries, by the reclamation of abandoned farms with increasing local population, by the general increase in our crop yield during the last decade, and by the natural tendency of soils to increase in fertility when properly treated. . . .

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[1] *Report of the National Conservation Commission.* 60th Cong., 2d sess., Sen. Doc. No. 676 (Washington, 1909), 43–111, *passim.*

Aside from careless or ignorant farming and such hostile climatic conditions as storms and droughts, the most serious enemies to crops are noxious insects and mammals. . . .

The total annual losses to the agriculture of the country, including live stock, animal products, and grain in storage, from insects, mammals, and disease is estimated at $1,142,000,000, or one-sixth of the total production. . . .

Our stock of water is like other resources in that its quantity is limited. It differs from such mineral resources as coal and iron, which once used are gone forever, in that the supply is perpetual; and it differs from such resources as soils and forests, which are capable of renewal or increase (provided the supply of water suffices), in that its quantity can not be augmented. It differs also in that its relative quantity is too small to permit full development of other resources and of the population and industries depending on them. Like all other resources, it may be better utilized. It must be better utilized in order to derive full benefit from lands and forests and mines. . . .

The first requisite for waterway improvement is control of the waters in such manner as to reduce floods and regulate the regimen of the navigable rivers; the second is development of terminals and connections in such manner as to regulate commerce.

Most of the headwaters, especially in mountainous regions, may be so controlled by forestation as to diminish floods and ameliorate low waters, and at the same time clarify streams required for water supply and augment the subsurface reservoir of ground water. . . .

Forests not only grow timber but they hold the soil and they conserve the streams. They abate the wind and give protection from excessive heat or cold. Woodlands make for the fiber, health, and happiness of each citizen and of the nation.

The fish which live in forest waters furnish each year $21,000,000 worth of food, and not less than half as much is furnished by the game which could not exist without the forest. . . .

Our forests now cover 550,000,000 acres, or about one-fourth of the United States. The original forests covered not less than 850,000,000 acres. . . .

The yearly growth of wood in our forests does not average more than 12 cubic feet per acre. This gives a total yearly growth of less than 7,000,000,000 cubic feet. . . .

Since 1870 forest fires have each year destroyed an average of fifty lives and $50,000,000 worth of timber. Not less than 50,000,000

acres of forest are burned over yearly. The young growth destroyed by fire is worth far more than the merchantable timber burned. . . .

We take from our forests each year, not counting the loss by fire, three and one-half times their yearly growth. We take 40 cubic feet per acre for each 12 cubic feet grown; we take 260 cubic feet per capita, while Germany uses 37 cubic feet and France 25 cubic feet. . . .

We should stop forest fires. By careful logging we should both reduce waste and leave cut-over lands productive. We should make the timber logged go further by preservative treatment and by avoiding needless loss in the woods, the mill, the factory, and in use. We should plant up those lands now treeless which will be most useful under forest. We should so adjust taxation that cut-over lands can be held for a second crop. We should recognize that it costs to grow timber as well as to log and saw it. . . .

Under right management our forests will yield over four times as much as now. We can reduce waste in the woods and in the mill at least one-third, with present as well as future profit. We can perpetuate the naval-stores industry. Preservative treatment will reduce by one-fifth the quantity of timber used in the water or in the ground. We can practically stop forest fires at a total yearly cost of one-fifth the value of the standing timber burned each year.

We shall suffer for timber to meet our needs until our forests have had time to grow again. But if we act vigorously and at once we shall escape permanent timber scarcity. . . .

The annual products of the mines of the United States now exceed $2,000,000,000 in value. They contribute 65 per cent of the freight traffic of the country. The industry employs over a million men at the mines, and twice that number in handling, transporting, and manufacturing the products.

The waste or losses in the mining, preparation, and use of the mineral products is estimated to exceed $1,500,000 per day.

The available and accessible commercial coal in the United States aggregates approximately 1,400,000,000,000 tons. At the present increasing rate of production this will be depleted and will approach exhaustion before the middle of the next century; and the additional 1,600,000,000,000 tons of inferior coal and lignite not now available economically will approach exhaustion before the end of the next century.

The known supplies of high-grade iron ores in the United States approximate 4,788,150,000 tons, which at the present increasing rate of consumption can not be expected to last beyond the middle of the

present century. There are also estimated to be 75,116,070,000 tons of low-grade iron ores which may hereafter be available.

The known supplies of petroleum, natural gas, and high-grade phosphate rock can not be expected to supply the nation's needs through the present century.

The losses from fire in the United States during 1907 were approximately $450,000,000, of which some $400,000,000 was preventable waste. . . .

The extension of the supply of our more important mineral resources is absolutely essential to the future welfare of the nation. How to accomplish this is a problem demanding the consideration of the best science and statesmanship the country affords.

First of all is the prevention of unnecessary waste; and for this the individual and the State and Federal governments must cooperate.

All unscientific or inefficient use of resources is waste; and the most important element in conservation is the fact that the necessary waste of to-day may, through inquiry or research or through economic conditions, become the avoidable waste of to-morrow. . . .

The duration of our mineral resources may be still further extended through investigations looking toward the substitution of common mineral substances for those which more rapidly approach exhaustion because of their rarity or greater importance, as, for example, the substitution of concrete for structural steel; of low-grade coals or lignite for those of higher grade; and of water power for steam.

Furthermore, in the case of certain supplies which are now being largely exported, or in the use of which waste is excessive, the duration may be extended for domestic use through such ownership or control as will prevent both sending out of the country and unnecessary waste.

Again, the prevention of waste, and hence the extension of the life of supplies, may be secured through such increase in the price of materials as will render practicable their more complete extraction and efficient use. . . .

B. *National Vitality: Its Wastes and Conservation, 1909* [1]

In discussions of conservation attention has usually been directed only to the problem of safeguarding and rationally using the natural resources of the country. But the development of the human resources is even more important. The importance of preventing disease and accident, of increasing vitality,

[1] *Report of the National Conservation Commission.* 60th Cong., 2d Sess., Sen. Doc. No. 676 (Washington), 623.

and of prolonging life were emphasized in a report made by Professor Irving Fisher to the National Conservation Commission. The desirability of further development and training of the human resources by means of education has already been emphasized in earlier readings.

The problem of conserving natural resources is only one part of the larger problem of conserving national efficiency. The other part relates to the vitality of our population. The two parts are closely interwoven. Protection against mining accidents, forest fires, floods, or pollution of streams prevents not only loss of property, but loss of life. The prevention of disease, on the other hand, increases economic productivity.

So far as we can compare vital and physical assets as measured by earning power, the vital assets are three to five times the physical. The facts show that there is as great room for improvement in our vital resources as in our lands, waters, minerals, and forests. This improvement is possible in respect both to the length of life and to freedom from disease during life.

Contrary to common impression, there is no iron law of mortality. Recent statistics for India show that the average duration of life there is less than twenty-five years. In Sweden it is over fifty years, in Massachusetts forty-five years. The length of life is increasing wherever sanitary science and preventive medicine are applied. In India it is stationary. In Europe it has doubled in three and a half centuries. The rate of increase during the seventeenth and eighteenth centuries was about four years per century, during the first half of the nineteenth century about nine years per century, during the latter half of the nineteenth century about seventeen years per century, and in Germany, where medical and sanitary science has reached the highest development, about twenty-seven years per century. The only comparative statistics available in this country are for Massachusetts, where life is lengthening at the rate of about fourteen years per century, or half the rate in Germany.

There is no need, however, of waiting a century for this increase. It could be obtained within a generation. Three-fourths of tuberculosis, from which 150,000 Americans die annually, could be avoided. Eighteen experts in various diseases, as well as vital statisticians, have contributed data on the ratio of preventability of the ninety different causes of death into which mortality may be classified. From these data it is found that fifteen years at least could be at once added to the average human lifetime by applying the science of preventing disease. More than half of this additional life would come from the

prevention of tuberculosis, typhoid, and five other diseases, the prevention of which could be accomplished by purer air, water, and milk. In Lawrence, Mass., after the installation of a pure-water supply, the death rate from typhoid was reduced by 80 per cent. For every death thus saved from typhoid, two or three deaths are saved from other diseases.

Judging from the English statistics of illness, we must conclude that at all times in the United States about 3,000,000 persons are seriously ill, of whom about 500,000 are consumptives. Fully half of this illness is preventable.

If we appraise each life lost at only $1,700 and each year's average earnings for adults at only $700, the economic gain to be obtained from preventing preventable disease, measured in dollars, exceeds one and a half billions. This gain, or the lengthening and strengthening of life which it measures, can be secured through medical investigation and practice, school and factory hygiene, restriction of labor of women and children, the education of the public in both public and private hygiene, and through improving the efficiency of our municipal, state, and national health service. Our National Government has now several bureaus exercising health functions, which only need to be concentrated under one department to become coordinated parts of a greater health service worthy of the nation.

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